Volume XXI Number 1

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DISEASES OF THE NERVOUS SYSTEM

A Practical Journal on Psychiatry and Neurology

JANUARY
1960

(CONTENTS ON PAGE 4)

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Contents

CHANGING TRENDS IN PSYCHIATRIC INTEREST 14
Jackson A. Smith, Walter M. Gysin, Elaine Mansfield and Keith R. Treptow

PHENYLTOLOXAMINE IN THE TREATMENT OF CHRONIC SCHIZOPHRENICS 19
Joseph A. Barsa and John C. Saunders

HYPNOSIS IN GENERAL PRACTICE—ITS LIMITATIONS 20
Joseph S. Blum

PSYCHOTHERAPEUTIC ASPECTS IN THE MANAGEMENT OF PATIENTS WITH MULTIPLE SCLEROSIS 24
Harold Bolding

THE ESCAPING ADOLESCENT 27
Ernest Harms

DIFFERENTIAL DIAGNOSIS BETWEEN A CALCULATED RISK AND A MASOCHISTIC ACTION 30
Edmund Bergler

A COMPARATIVE STUDY OF PROMAZINE AND TRIFLUPROMAZINE IN THE TREATMENT OF ACUTE ALCOHOLISM 32
Frances Gruenwald, Thomas E. Hanlon, Stella Wachsler and Albert A. Kurland

REPORT ON A PHENOTHIAZINE OF HIGH CLINICAL POTENCY 39
Herman C. B. Denber, Paul Rajotte and Dorothy Kauffman

THE MAGIC OF LISTENING 41
Dominick A. Barbara

APPRAISAL OF DARTAL IN TREATMENT OF HUNTINGTON'S CHOREA 46
Charles Fulghum, W. J. Buffaloe, Delores Smith and Evelyn Jernigan

"SCHIZOPHRENOGENIC MOTHERS"; AN APPLICATION OF THE CONCEPT 47
Fernando Tapia

EVALUATING A NEW ANTICONVULSANT IN A "THERAPEUTIC COMMUNITY" 50
C. H. Carter

TRANSVESTITISM 52
Alfred E. Eyres

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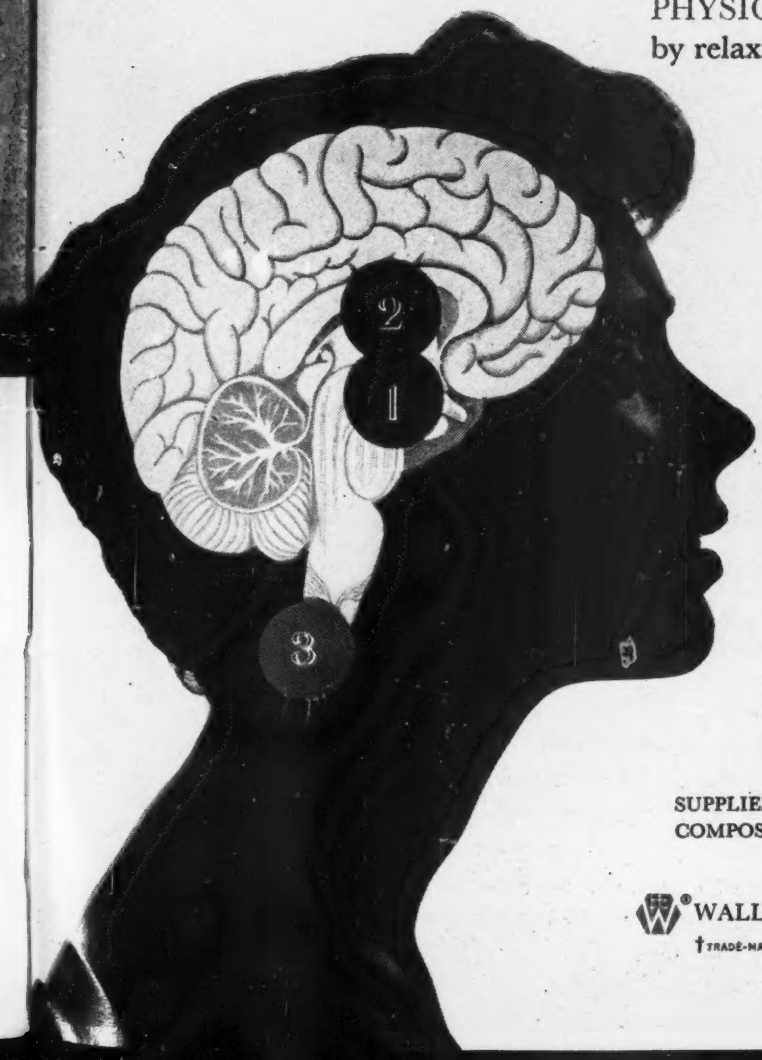

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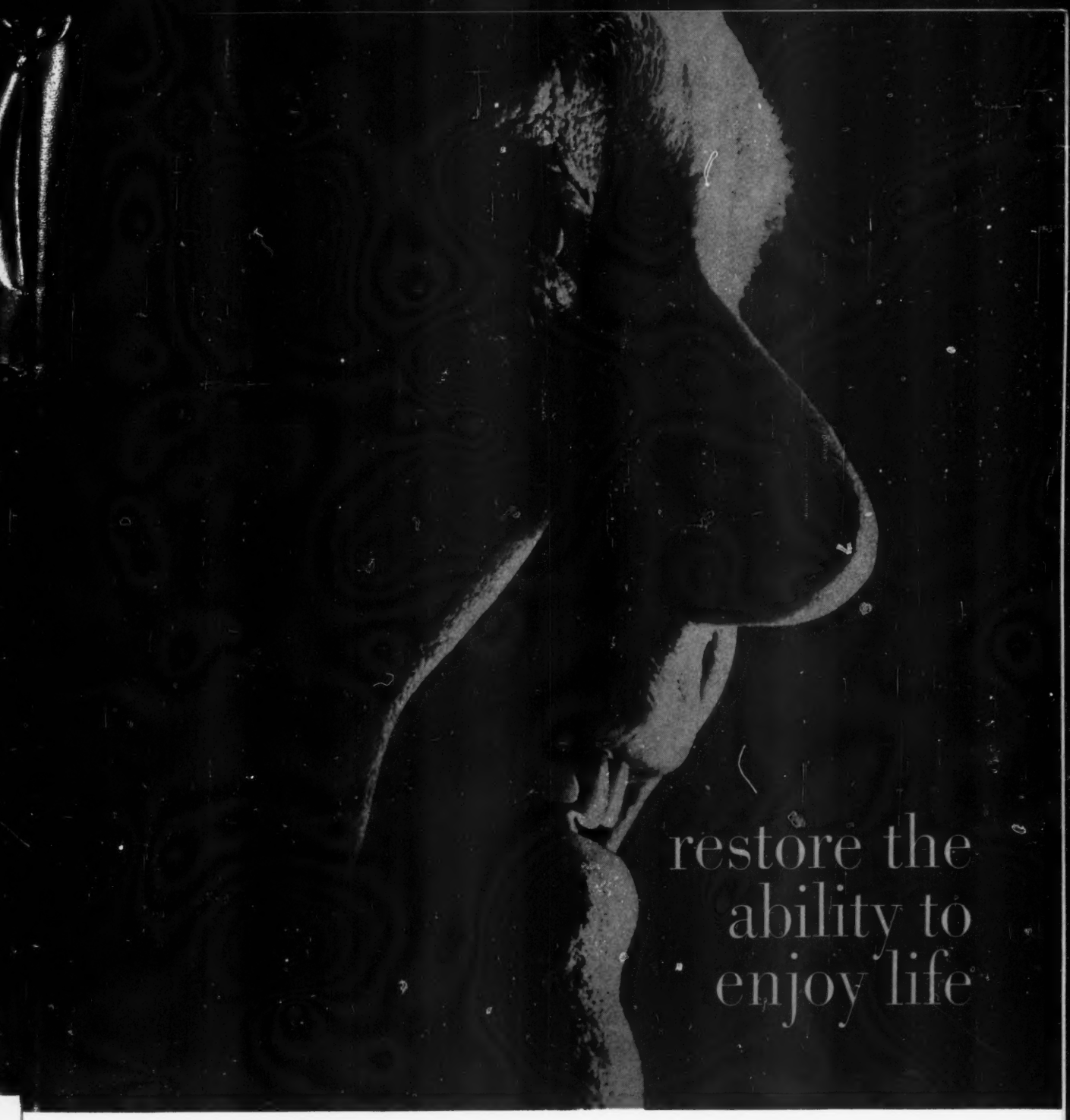

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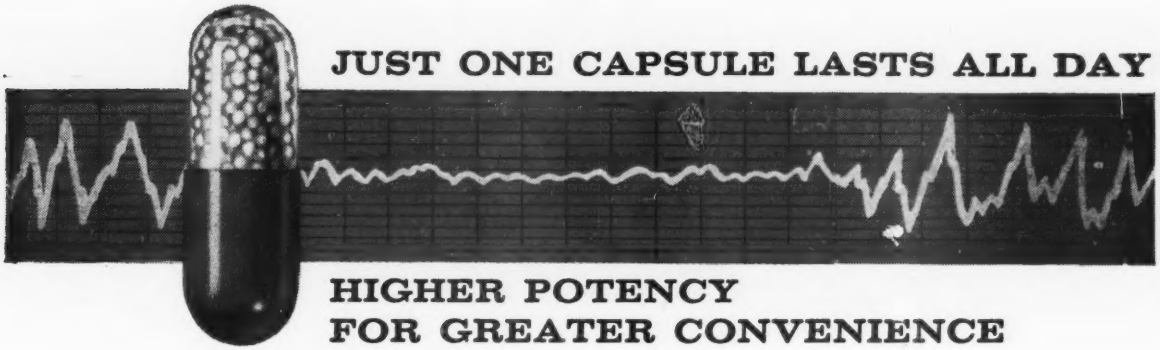

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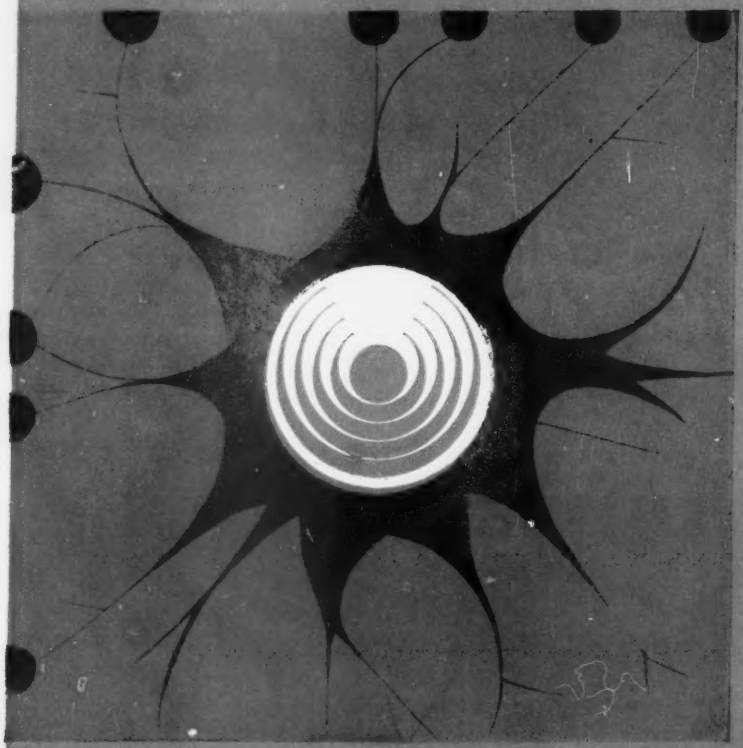

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DISEASES *of the* Nervous System

A PRACTICAL JOURNAL ON PSYCHIATRY AND NEUROLOGY

Changing Trends in Psychiatric Interest

JACKSON A. SMITH, M.D., WALTER M. GYSIN, M.D., ELAINE MANSFIELD, M.P.N., and KEITH R. TREPTOW, M.D.

On the presumption that reports in the American Journal of Psychiatry would offer a measure of prevailing psychiatric interest and thought, the titles of the papers published in this journal for 16 years were surveyed. The period covered was from January 1, 1943 until January 1, 1959. During these 16 years events of considerable moment in this field occurred including: two wars, introduction of "tranquilizers" and "energizers" and an extensive trial of psychosurgery.

In addition, events peculiar to the Journal itself occurred; these are shown in Figure 1. Prior to July 1947 there were six issues annually, subsequently it was published 12 times a year. Doubling the number of issues did not markedly increase the total number of reports published. The broken line at the top of the graph represents the total number of scientific articles published each year.

The Journal has undergone another change, which is related to the sudden increase in "Clinical Notes" (undoubtedly some have considered this a malignant change since most of this new growth reflects the interest in first the "tranquilizers" and, most recently, the "energizers"). The "Clinical Notes" are represented by the solid line in the graph, and it is noted that they made up a small percentage of the total articles until 1954 when they began to increase rapidly in number. In 1954 there were two and in 1958 there were 73. The lower dotted line represents the "Case Reports" which have shown a relatively slight numerical increase.

From Nebraska Psychiatric Institute, Omaha, Nebraska, and Norfolk State Hospital, Norfolk, Nebraska.

Method

The papers were first considered according to their listing in the Journal as "Scientific Articles" or "Clinical Notes."

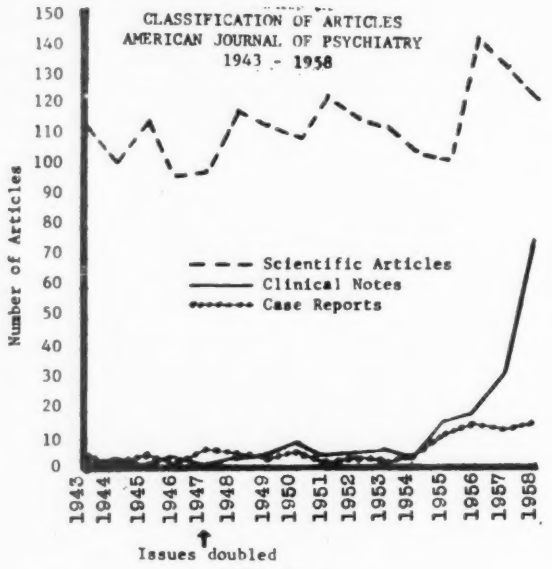


Figure 1.

Section I: Scientific Articles

An attempt was made to group the Scientific Articles under the following major classifications: *Treatment, Diagnosis, Basic Research, War,* and *Miscellaneous.*

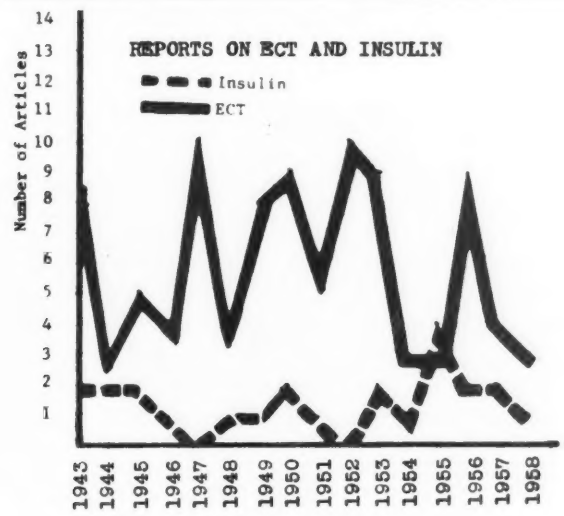
These categories are arbitrary and undoubtedly other headings equally descriptive of the contents of the articles could have been chosen. But categorizing titles which varied from "The Jaw As an Organ of Aggression" to "The Medical View of the Menopause" allows some degree of license which has been taken.

The different types of treatment are considered as follows: Insulin, Electro-convulsive Treatment, Lobotomy, Psychotherapy and Drugs.

Figure 2 shows the reports on insulin and electro-convulsive therapy during this period. The dark line represents electro-convulsive therapy, and the years when an apparent increase occurs usually coincide with the introduction of some modification in procedure. The broken line is the insulin treatment and little change in the frequency of the reports is seen. Papers describing the combined use of insulin and electro-convulsive treatment were too few to graph. It appears that the interest in electro-convulsive treatment has been consistently greater than in insulin. If the tranquilizers replace insulin, this transition will probably be marked by few publications unless a too critical article provokes a few replies. An earlier study of 100 reports on therapy revealed the infrequency of negative reports particularly after the interest in a therapy had faded.[1]

Figure 3 represents the papers on lobotomy. The greatest number of articles was published in 1949. The majority of the reports since that time are concerned with a follow-up on earlier operations.

Figure 4 relates to psychotherapy of whatever type or particular application. The increased number of papers on this subject beginning in 1952 and continuing through 1954 was due primarily to the frequency of re-



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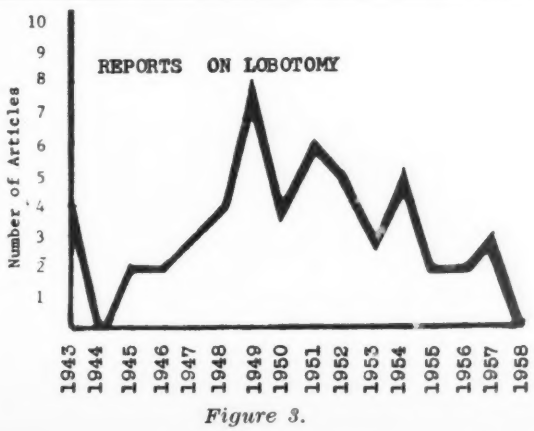

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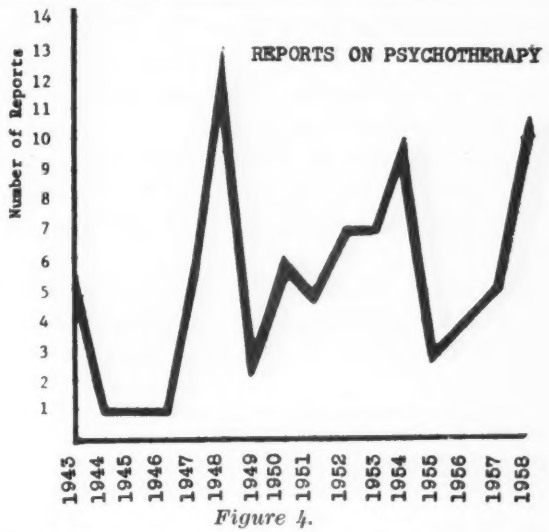

Figure 4.

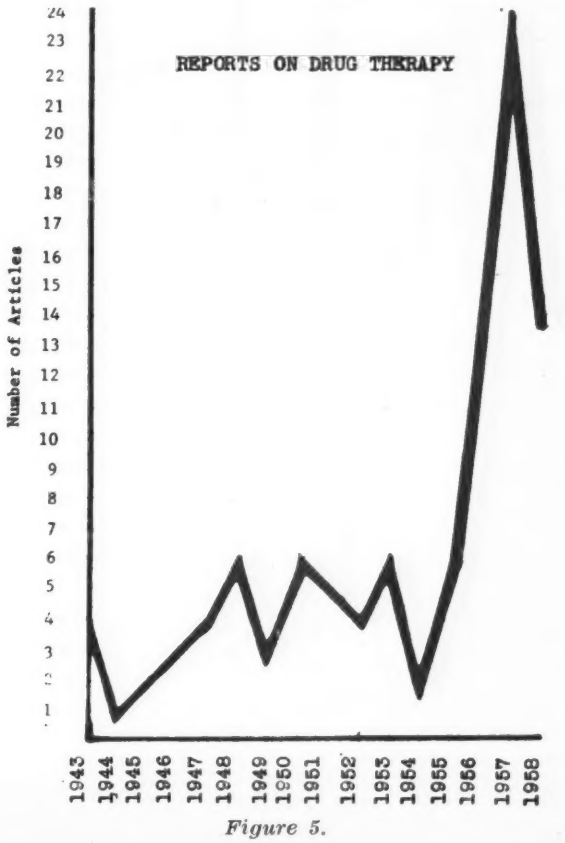

Figure 5.

ports of group psychotherapy. In addition, various aids to psychotherapy such as Pentothal Sodium, sub-coma insulin, bibliotherapy and art were described. Conspicuously infrequent during this 16-year interval were papers on brief psychotherapy with the outpatient, although this is perhaps the most generally recommended and most widely used type of psychiatric treatment.

Figure 5 shows the scientific articles describing treatment efforts with various medications. A rise is noted in 1955, as the tranquilizing medications began to appear. The drop in 1958 is misleading. It does not reflect a decrease in drug reports but results instead from the marked increase in "Clinical Notes" in which studies of this type were reported.

Figure 6 shows the frequency of papers on "Clinical Description." These papers generally relate to clinical psychiatry and include efforts to clarify diagnostic groups, meaningful factors in prognosis, the relationship of events in the history to the present illness, psychopathology, and the evaluation of the individual patient.

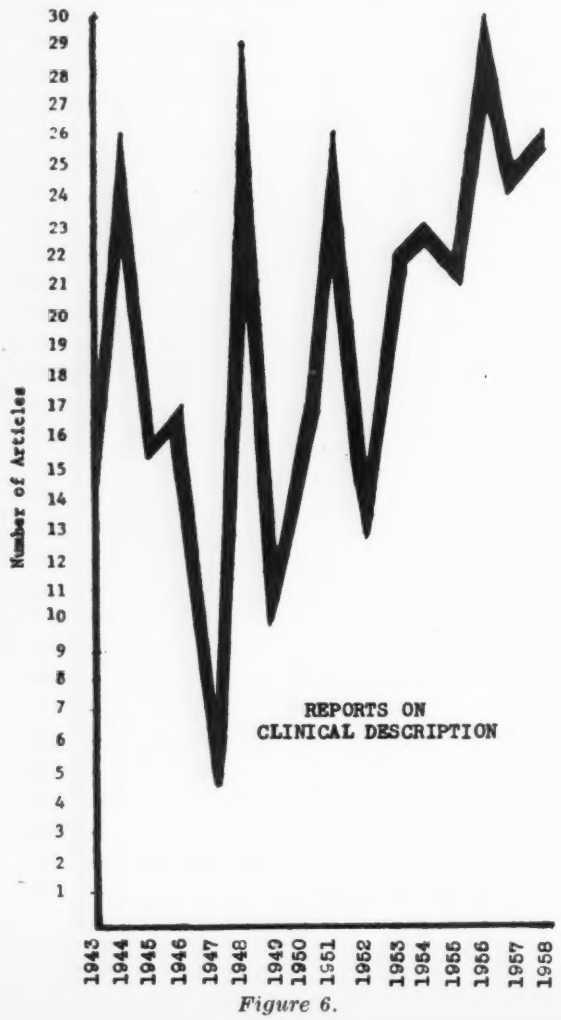

Figure 6.

These papers are also concerned with changes which can be observed clinically and the relationship of these changes to obvious external factors. This group does not include papers which emphasize treatment of the condition described nor papers dealing with biochemical or physiological changes. For instance, two papers published in 1944 titled "The Characteristics of the Psychopath" and "The Myth of the Psychopathic Personality" would be included here (although they are somewhat contradictory); whereas such a title as "The Basic Metabolic Rate, Fasting Blood Sugar, Glucose Tolerance and Size of the Sella Turcica in Homosexuals" would not. The continuing interest in such reports is shown by their tendency to increase in number during this 16-year period.

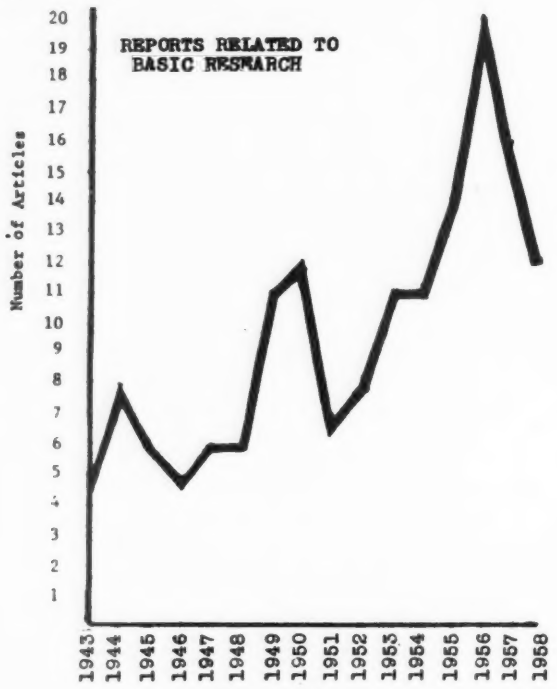

Figure 7.

Figure 7 deals with papers on basic research. Under this heading are included neurological studies relating to structural change and animal work, as well as biochemical, physiological and hormonal reports. A gradual increase in the number

of such studies has occurred during the past 16 years.

Figure 8 shows the frequency of reports directly relating to the two wars occurring during this interval. The greatest number were reported in 1943 and included many of the observations made during the first year of World War II. The majority of these reports describe psychiatric problems with inductees. Reports of combat reactions and methods of treatment begin in November 1944 and are seen with increasing frequency during 1945 and 1946. Why the marked drop in reports in 1944 occurred is unexplained. Possibly the potential authors were drafted in the interim. The conflict in Korea produced relatively little change in military psychiatry and little interest among psychiatrists. It was not until 1952 that observations related to this encounter began to appear. The peak seen in 1954 included as many reports of follow-up studies on World War II as titles which pertained to Korea.

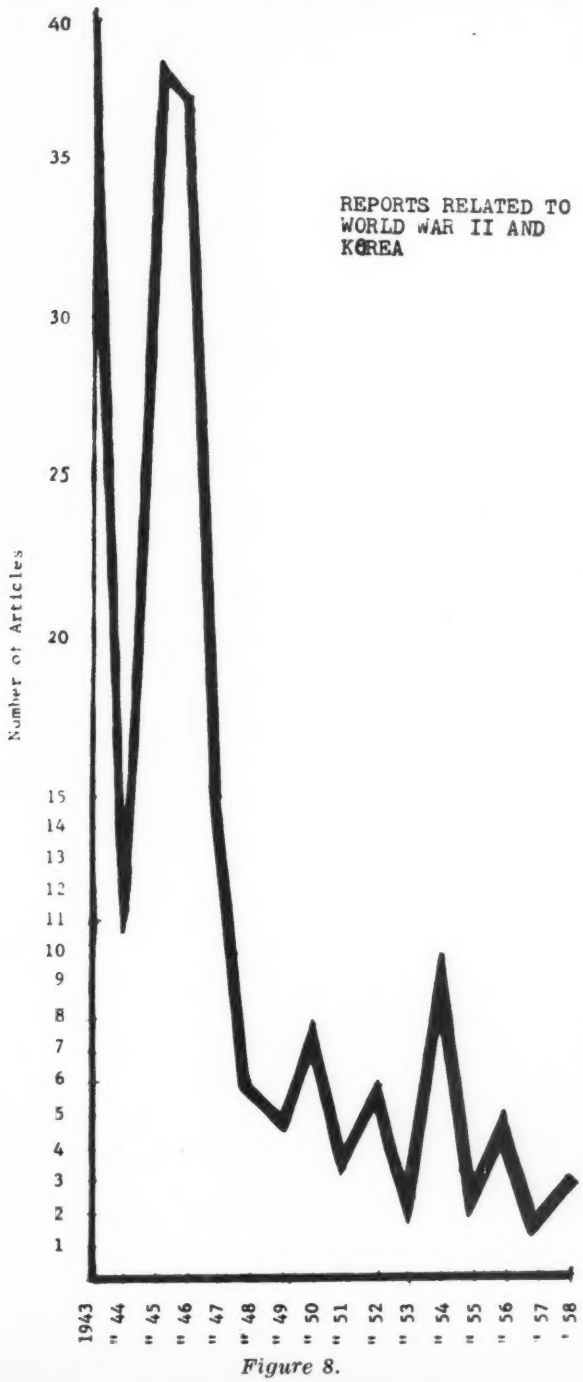

Figure 8.

Section II: Clinical Notes

The second large group of reports listed in the Journal are the "Clinical Notes." They are briefer than the scientific articles and the findings frequently present the author's preliminary impression of a particular treatment. (See figure 1.)

During this 16-year interval, 170 Clinical Notes were published in this journal, 80% of this total appearing since 1955. The subject of the majority of these articles was treatment with tranquilizers and energizers.

Differences in results using the same compound were occasionally seen, but these differences were more apt to occur when the patient groups treated were not comparable. For instance, in less than 30% of these reports which dealt with drug evaluation were the patient groups homogeneous as to diagnosis or duration of the illness. Frequently, patients with psychotic and psychoneurotic disorders, and those acutely and chronically ill, were included in the treatment group and the incidence of improvement for all the patients was reported.

Only 22% of the studies included a control group; in the remainder, the patient acted as his own control and the behavior before and after treatment was utilized as the measure of improvement. Approximately 12% of these studies had a follow-up of some type to determine the duration of the improvement seen. This is to be expected, since the majority of these reports were preliminary.

It should also be noted that many of these drug studies were carried out on chronically disturbed, agitated patients, whose refrac-

tory state had been unaltered by previous treatment efforts. In such patients, a desirable change in behavior with an increased interest in self and environment is more readily apparent than in those less ill. Therefore, using this type of patient as his own control probably has more validity than a less disturbed out-patient's subjective appraisal of his state.

Discussion

The most obvious newly acquired psychiatric interest reflected by the number of papers is in the tranquilizers and energizers. The original appearance of a new concept in psychiatry always merits mention. The use of a new energizer provoked the following: "The substance in some way increases the available energy of the individual and actual somatic and psychic benefits seemed to be derived from its administration, especially in the affective disorders." The energizer was hematoporphyrin, the authors were the late Dr. Strecker and Dr. Braceland, and the work was done in 1933.

Different degrees of interest in similar acting compounds were also noted. For instance, between 1954 and 1958 there were 47 papers on chlorpromazine and only 8 on reserpine, although they were introduced at about the same time and are reportedly effective in similar types of cases (there were 10 studies in which both compounds were used). Thirteen other tranquilizers (most of which were phenothiazine derivatives) were also reported but most appeared on only one or two occasions.

On the possibility that psychiatric thinking might be influenced by the advertisements of the drugs as well as the scientific reports, this influence on psychiatric thinking was checked. The advertisements in the Journal in July 1948 and July 1958 were compared. In 1948 advertisements for only three drugs were found, while in July 1958 there were 16. The influence of advertisement might be presumed to work in other areas as well as pharmaceuticals; therefore, a second category, advertisements of books, was checked. In 1948 five ads were devoted to describing desirable monographs; after 10 years of progress, there were two.

Perhaps the most encouraging advance in this 16-year period, the improved results in the treatment of paresis, received the least attention. The last report on this condition was in 1953. If this is the typical result of finding a treatment which is specific for a given illness, it may be presumed that at some future date, so massive a disorder as schizophrenia might similarly disappear from psychiatric literature. This seems most improbable at the moment; but in the past the likelihood of paresis disappearing from the scene perhaps appeared equally unlikely.

It seems likely that the papers in this journal reflect rather closely the methods followed in the treatment of psychiatric inpatients during this interval. It is also worth noting that some of the most dramatic "cures" and "causes" of mental illness which were reported in other medical publications and in the lay press either did not appear in this journal or were favored with only a negative report. In other instances, a procedure or a drug would be enthusiastically reported, and then disappear without so much as a negative report to mark its passing.

The scarcity of papers on brief psychotherapy with the individual out-patient presumes this procedure is carried out in about the same manner now as it was 16 years ago. In 1952, Dr. Bartemeier in his presidential address pointed out the need to make psychotherapy a less vague and more systematized branch of psychiatry to prevent its becoming an amateurish, psychological indulgence. Possibly this need should be repeated yearly.

There were relatively few papers on aging although the importance of the rapidly growing problem of aged patients in mental hospitals was noted. In fact, it seems that Dr. Cheney, in 1936, was the last to question in any way the desirability of a more prolonged survival, when he asked, "What shall it profit a man if he adds 10 years to his life and thereby loses his mind?"

A consideration of the effects of prevailing conditions on the development of mental illness is most likely to appear in the annual presidential address; mention of our present rather explosive era was made by Dr. Brace-

land in 1957. He was firmly in favor of having an earth for the meek to inherit. Another president of this Association was even more concerned over the "characteristic fast age in which we live" and attributed the increase in mental illness to our "rapidly rushing people" and the nervous and physical strain prevailing—in 1886.

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Phenyltoloxamine in the Treatment of Chronic Schizophrenics

JOSEPH A. BARSA, M.D., JOHN C. SAUNDERS, M.D.

Phenyltoloxamine (PRN; Bristamine) has been marketed by Bristol Laboratories for several years as a potent antihistamine. This compound also has local anesthetic properties as well as mild antispasmodic action. Recently Sainz[1] reported success with this drug in the treatment of chronic deteriorated patients regardless of diagnosis. The present study was undertaken to test his results.

Sixty chronic schizophrenic female patients were selected, ranging in age from 24 to 64, and they had been continuously hospitalized for 5 to 24 years. All patients had been previously treated for at least one year with reserpine, chlorpromazine, prochlorperazine, or a combination of these drugs, with little or no improvement in their psychosis. They remained untidy, seclusive, withdrawn, apathetic, preoccupied, delusional, and often hallucinated. All tranquilizing drugs were discontinued prior to treatment with phenyltoloxamine.

Phenyltoloxamine was started at 100 mg. four times daily and was increased every fifth day by increments of 400 mg. daily, until either satisfactory therapeutic results were obtained or untoward side-effects appeared. The highest dose reached was 800 mg. four times daily. The patients received the drug for three to five months.

It was observed that in the early stages of therapy, when the dose was below 1600 mg. daily, most of the patients showed signs of stimulation, becoming more alert, but also more restless and irritable. As the daily dose rose above 1600 mg. the evidence of excessive stimulation disappeared, and in many of the patients there seemed to be a real improvement in the psychosis. The patients became neater in their habits and appearance, more interested in their environment, and less motivated by delusions and hallucinations. Unfortunately, however, most of the patients could not tolerate the high dose because of side-effects.

Forty patients complained of nausea or anorexia; ten of these also experienced vomiting. Fifty patients showed a weight loss of 2 to 31 lbs., with an average of 10.6 lbs. Ten patients complained of generalized weakness, and three experienced syncope. Four patients became extremely ataxic in their gait. Two patients showed signs of parkinsonism, with rigidity, tremor, loss of associated movements, and excessive salivation; and two patients manifested generalized tremulousness. Two patients developed a posture in which their head and body were tilted rigidly to one side. All of the above side-effects disappeared when the dose of phenyltoloxamine was reduced but with the reduction of dose, the anti-psychotic effect of the drug was no longer evident. Hematological, liver profile, and urinary studies showed no significant changes in any of the patients.

At the end of 3 to 5 months the patients were evaluated for improvement in their psychosis. One patient was considered markedly improved, i.e., in remission, and able to be released from the hospital. Three pa-

From Rockland State Hospital, Orangeburg, N. Y.

tients were moderately improved, four slightly improved, and the remainder unimproved. It was felt, however, that the amount of improvement would have been much greater if more patients could have tolerated a higher dose for a longer period of time.

Since phenyltoloxamine in smaller doses produced predominantly a stimulating effect, it was decided to use the drug in combination with chlorpromazine. Thus, phenyltoloxamine in doses of 50 to 100 mg. four times daily was combined with chlorpromazine in doses of 50 to 150 mg. four times daily. This combination was continued for three months, with no evidence of further improvement. In fact, a third of the patients showed increased irritability. The stimulating effect of phenyltoloxamine, therefore, when the drug was combined with chlorpromazine, had no therapeutic value.

In summary, it can be stated that phenyltoloxamine in small doses produces primarily a mild stimulating effect, and in high doses has a fairly potent anti-psychotic effect. However, because of side-reactions most of the patients were not able to tolerate a high dose for a sufficient period of time.

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Hypnosis in General Practice — Its Limitations

JOSEPH S. BLUM, M.D.

Suggestibility is a universal trait of all animal life, and is the oldest therapeutic procedure for the relief of pain, anxieties, tensions and frustrations. From ancient healers, holy men, witch doctors, philosophers, early medical men, even throughout the bible story and up to the present date, many evidences of the use of "hypnosis" have been recorded. It is as old as mother love.

Much of the early literature began to appear with the birth of a scientific approach to hypnotism, fathered by James Braid. Bernheim, Liebault and Bramwell were but a few of the generalists who described in detail their case histories and techniques. Soon the neurologists of the Charcot and Nancy schools spread the gospel throughout the world. Freud used, then rejected it in his analytic therapy. For an excellent study of this paradox, see Kline's recent volume on this subject.

Three wars in this century saw its achievement of prominence and respectability, enhanced by spectacular therapeutic results in "battle fatigue" states. Scientific experiments in the laboratory conducted by Hull, Huse, Williams and others eradicated much of the mystic atmosphere of the discipline. Clinical papers from the Menninger Clinic, Erickson, Wells, Rowland, Kubie, Margolin, P. C. Young, Wolberg, Rosen, Kline and a host of others began to appear in reputable journals. Demonstrations and experiments in university laboratories assigned to hypnotism a strong position in the field of psychotherapy. More recently the psychosomatacists have begun to utilize hypnotic techniques to advantage.

The art of general practice includes all the factors associated with the hypnotic situation. These include suggestion and suggestibility, motivation, the doctor-patient relationship, empathy, and communication. What is understood as the "waking hypnotic state" is ever present in the therapeutic situation. Therefore, the use of this therapeutic tool is much like increasing the dosage or changing a drug. The broad volume of general practice, with its variety of illnesses, places the generalist in a particularly advantageous position to utilize hypnosis, and enhance the efficiency of his therapy. However, as in drug administration, where attention must be given to idiocyncracies, overdosage and incompatibilities, hypnosis must be dispensed with caution. One must especially recognize its limitations and dangers in general practice.

As a recognized branch of psychotherapy, hypnosis requires a considered knowledge of

psychodynamics for its smooth and effective application. It is the responsibility of the practitioner to avail himself of this information through the literature, postgraduate courses in psychiatry, society participation, seminars on hypnosis and supervisory guidance.

My experiences with waking suggestion, over a twenty-five year period, led me to use hypnotic techniques. By definition, suggestion is a hint, verbalized or sensed, which starts a chain of ideas and possibly initiates action. The contagious reaction of a yawn is a simple example. Direct communication produces an association of ideas. Iteration or repetition with its resulting monoideism brings about physiological and psychological changes in the individual.

Hypnotic techniques induce hypersuggestible states. Another tool is thus given the generalist to be utilized in any condition with a functional component: to reduce fear and turmoil, allay pain, produce a deeper insight, re-educate, change pernicious habits, or improve total personality functioning. Along with the physiologic approach to medical problems, which began with Virchow's concept of cellular pathology, an understanding of psychological principles and dynamics of human behavior will permit the general practitioner to view the patient in greater entirety and rid him of many conditions included in the field of psychosomatic medicine.

In selecting patients for hypnotherapy, several factors should be taken into consideration:

1. *A thorough physical examination should be done.* If the subject shows a psychotic component, the case must be rejected or referred to a psychiatrist. Dr. Harold Rosen warns that any condition with strong emotional overtones should be handled by an experienced psychiatrist. He states: "There is danger of precipitating out overt clinical symptomatology in borderline or dissimulated psychotic conditions. Psychologically based symptoms serve a function, and the nature of the hypnotic relationship itself is exquisitely sensitive, so that a calculated risk is taken in using hypno-therapy. Removal of symptoms or their suppression may replace them by more severe disabling symptoms or precipitate, sooner or later, the original ones." A masked depression may lead to suicide. The extremely sensitive relationship between the patient and doctor, with the careful weighing of every word, may lead to unexpected behavior on the part of the patient, such as masturbatory activity, overt sexual advances or even attempts to harm. I have fortunately never experienced an embarrassing situation to this date, but it can conceivably happen. Dr. Erickson and others of much wider experience negate the dangers. I believe this to be due to careful selection of cases, rapid cessation of therapy in necessary situations, a recognition of possible danger areas, and an ability to cope with an embarrassing situation.

2. *The patient's motivation for the relief of symptoms must be strong.* Undercurrent abnormal motives should be ferreted out, if possible. Misdirected motivation may conceal a desire to escape reality and may thereby become addicted, or even strive for a transference of a love or hate object.

3. *The doctor's motivation must be recognized as healthy, worthy and legitimate.* The challenge must be foremost in his mind, since the time and energy consumed in the procedure is most fatiguing. Satisfaction comes with the good results often obtained.

When I accept a patient for therapy, I familiarize him or her with the procedure, correct false notions, answer questions, increase motivation and generally try to elicit cooperation. The setting is made comfortable, and appropriate interpersonal relationship attempted through careful verbalization, gestures and demeanor. I then proceed to use any of the accepted techniques which fit the situation. This varies with every patient. Actually there are as many techniques as operators, and any one or combination will be effective as long as the subject knows and senses what is expected. I attempt a naturalistic approach to begin with, utilizing eye fixation, fantasy projection, and hand levitation, if necessary. Lid closure is requested in a permissive manner or on command. Feelings of drowsiness, numbness, increasing relaxation are verbalized in a manner indigenous to myself. All reactions on the part of the subject are noted and utilized to deepen

the trance. No testing is attempted in the early stages, but when a light trance is obtained provisions are made for future rapid induction. Treatment is then begun, consisting of modification of symptoms or changing behavior patterns, as the situation demands. The subject is praised for cooperation and brought out of the trance slowly, with suggestions of alertness, satisfaction, absence of muscular discomfort and headache. A simple post-hypnotic suggestion of thirst, with the required sip of water to eliminate the dryness is relative proof of a successful session, when carried out.

With bed patients in the home or hospital, the technique is more simple. Usually these people are so desperate for relief of pain, as in cancer or hysterical paralysis, that they are amenable to a sympathetic attitude, a gentle verbalization to relax, to close the eyelids and listen to a patter which may be of some help. These people respond quickly and surprisingly well.

An indirect technique has proven successful in a few cases of insomnia. While talking to a third party about the use of hypnosis, the patient went into a trance state. This was followed with suggestions of improved sleeping capabilities.

Case Histories

Case 1. Hysterical Epilepsy. This female, age forty-eight had been having daily epileptiform seizures since the death of her mother seven years before. A complete work-up at the Psychiatric Institute, University of Maryland, revealed no evidence of organic disease. The use of the interview technique in psychotherapy produced no benefit to the patient. She related to the hospital doctors that I had been able to bring her out of the seizures, which at times lasted up to two hours, by simply massaging her neck, telling her to relax her muscles, gently massaging her spasmodic limbs, and talking soothingly in a "motherly" fashion. Post-hypnotic suggestion was given to her that anyone using my name and this technique would be able to bring her out of her seizures. No attempt was made to completely eliminate her symptoms. Hospital attendants, her uncle, and on one occasion a fellow patient in the hospital, were successfully able to bring her out within minutes. The husband, toward whom she was hostile, was the only individual unable to assist her.

Case 2. Obesity and Hysterical Deafness. This patient was induced by the conventional method of eye fixation. She quickly, on the first attempt, went into a moderately deep trance, and post-hypnotic suggestions for repugnance to rich foods were offered. A diet was outlined and a suggestion of nausea was made towards concentrated sweets or fatty foods. The latter were enumerated. The picture of her slim sister, whom she wished to emulate, was suggested. In succeeding sessions, a hearing impairment and tinnitus was eliminated. Audiometer tests and an ear examination by a specialist verified that this was hysteria. The patient was hypochondrical, and she was informed about the psychodynamics, and the need she had for some symptom. She was told that the ear symptoms would be improved upon, but that she might develop symptoms in another area, which would be less annoying and tolerated better. She was quite content with this substitution. Of course, she was told that should she have no further need for somatic complaints, that symptom substitution would no longer occur. This patient is still under my care, and as expected, almost every part of her body has been sensitized from time to time. She is beginning to understand and accept the explanation of this phenomenon. She tolerates her symptoms better, is less anxious, and functions in an improved manner in the household. When a symptom becomes particularly aggravating, she comes in from time to time to have the symptom relieved or transferred.

Case 3. Hysterical Coma. An ambulance was called to remove this patient to a hospital after being in a comatose state for two hours. I knew the patient and the domestic situation, and realized the possibility of hysteria. I asked the ambulance people to await my arrival, and within a few minutes brought her out of coma, with suggested crying and relief of emotional tension. She was in an ideal state for accepting hypnotic suggestion. Actually there had been no coma. She heard my voice with eyes closed and body tense.

Case 4. Asthma Relief With the Removal of Emotional Overlay. This patient was managing a restaurant at the time and was in fear of losing her job. Severe attacks of asthma, required her to remain at home or leave her place of employment. After five hypnotic sessions, she obtained sufficient relief with the use of phenobarbital and the fantasied inhalation of Utah mountain air for the relaxing of the bronchial tubes. Information was obtained from the patient that only once in eight years had she been completely relieved of her asthma. The occasion was a visit to her daughter in Utah. A nostalgic memory of this occasion, with an occasional quarter grain phenobarbital tablet, brought about relief, but no complete disappearance of her asthma attacks. For two years, she has been working in the above mentioned position, without loss of time. She has also ceased her antigen treatment, which had been kept up for eight years.

Case 5. Stammering With Inability to Use the Phone, Essential to His Work As a C.P.A. After five sessions, with instruction in auto-hypnosis, limited to this single area of difficulty, this patient has been improved. He no longer requires his wife by his side to communicate on the telephone for him.

He has improved to a great degree with respect to stammering on other occasions. This patient was experimented with to determine how much he could utilize his limited hypnotic techniques, post-hypnotic suggestion having limited this ability to the one area of difficulty. He has been unable either to hypnotize others, or to go beyond simple relaxation of his own speech nerves and muscles.

Case 6. Carcinoma. I have treated many cases of intractable pain due to metastatic carcinoma, utilizing techniques ranging from simple suggestion to deep hypnosis. In almost every case some improvement was noted with respect to reduction of narcotics, improvement in attitude, and reduction of anxiety. All techniques of induction have been utilized, and one seems to be as good as another.

Cases 7 and 8. Two Cases of College Students Who Wished to Improve in Their Studies. Induction was rapid, as is usually the case in this age category. The orthodox method of induction was utilized, since this was expected. Post-hypnotic suggestions were given for relaxation when studying, attention to material being learned, concentration and elimination of external annoyances. Easier recall of learned information by the use of the key word "relax" was given. The results in these two cases were excellent as attested by improved marks.

Other types of cases include preparation for obstetrical delivery, insomnia, behavior problems in children, alcoholism, tension headaches and dysmenorrhea. Currently a case of neurodermatitis is being treated after several years of dermatological care. The last skin specialist advised hypno-therapy. This patient is in his third weekly session, and improvement is definitely noticed. Another current case of nightmares in a child has successfully terminated. It was suggested to the child that she dream once more about the horror moving picture that caused the onset of this behavior disturbance. She recounted this dream in full, and since it was suggested that this would end the situation, she has no longer been troubled with this particular nightmare. Understanding the psychodynamics, in a childish fashion, she is developing more insight, and therefore a greater control of this emotional quirk.

Summary

Suggestive therapy has been utilized since animal life first appeared on this earth. Scientific hypnosis dates from the middle of the past century. Through many vicissitudes, this branch of psychotherapy is now once more respectfully recognized as a medical tool. In general practice, its use should be limited to relief of symptoms, reduction of fear, allaying pain, producing deeper insight, re-educating, changing pernicious habits and improving total personality functioning.

Cases have been presented with methods of induction.

Association in the two national societies, attendance at seminars, post-graduate courses in psychiatry, and extensive reading have produced greater confidence, and greater realization of the limitations and dangers of this discipline.

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Psychotherapeutic Aspects in the Management of Patients with Multiple Sclerosis

HAROLD BOLDING, M.D.

The work reported here constitutes a study of the emotional factors involved in a unique chronic illness, multiple sclerosis. The cause of the disease has not been tracked down or elucidated. Our hopeful patients are fond of repeating the slogan: "M.S. means mystery solved." Hope is justified in the light of the promises of current research but as things now stand much remains in the category of the unknown. For this disease there is no specific treatment. Therefore, patients are willing to subject themselves to any form of experimental treatment, including psychotherapy. Some even have fantasies of being released from handicaps obviously due to permanent damage. Diagnosis can be difficult and the story of misdiagnosis is told repeatedly. Frequently, diagnosis of psychiatric disorder is made, only to be reversed later when the neurological diagnosis is established. Often the psychiatric diagnosis is also correct.

The role of hysterical conversion in the symptomatology of multiple sclerosis presents a challenge in research as well as in the understanding of the individual patient. Symptoms are often realistically distressing, as well as being charged with symbolic significance. These include limitations imposed by motor weakness, pain of muscle spasm, the problem of bladder control and the drunken-like slurred speech and ataxic gait. Finally, somewhat like coronary artery disease, there is the every-minute threat of recurrence, the possibility of further damage with its implication of mortal consequence. Every multiple sclerosis patient who understands the nature of his illness, must, at some time and at some level of awareness, confront complex feelings involved in having a potentially fatal disease.

With these and other considerations in mind, community patients with the diagnosis of multiple sclerosis carefully established have been studied in group therapy sessions at the Neurobiological Unit of the Boston State Hospital for four years. Earlier reports of this group therapy program have been published.[1,2] The time period embraced in the present study is 2½ years. Group meetings of 90 minutes duration were held weekly. Group size ranged from four to seven members. All were male patients who had had multiple sclerosis anywhere between ten and 20 years, the average being 15 years. The youngest patient was 28 and single. The others were married men in middle life. All except one had weakness and spasticity of the lower extremities but were able to walk with the aid of a cane. The majority had bladder disfunction. In this group therapy was not complicated by organic intellectual disturbance. Superficial affect was uniformly that of general good humor or casual pleasantness, but in therapy these patients were serious and showed capacity for empathy. Depression was encountered as well as mild elation but there was no euphoria. The uniform absence of overt hostility has been commented on in the previous reports. In special situations, however, one sensed in the group a feeling of hurt anger and at these times an attitude of defenselessness prevailed in each member.

Day[1] has outlined the characteristic ego defenses encountered in the formative stages of the therapeutic process. The experience here reported permits further understanding of the patients' attitudes toward the illness, the treatment, the therapist and toward each other.

Attitude Toward the Illness

Even though the patients had suffered the disease for many years and had made extensive social and economic adjustments because of it, some of the elements in the struggle against acceptance were not always dormant. Incidents of residual protest would occur sporadically, especially with the younger members of the group. One of the

From the Neurobiological Unit and Research Clinic of the Boston State Hospital, Boston, Mass.

older members pointed out the inevitability of yielding to the need for a cane. Even some members had purchased one long before they could bring themselves to use it. Often a serious fall would be the event which influenced final acceptance. In this connection one patient recommended an attitude of resignation but the periods were brief when this philosophy was touched on verbally. The patient seemed to live it rather than talk about it. It is subtle and difficult to examine critically because this attitude of the patient excites the admiration of all who have to do with these cases with the exception of their families.

Our group was selectively of one sex for the purpose of exploring the sexual difficulties occurring in patients with this disease. As soon as the life of the group had progressed far enough for the members to feel secure, they utilized the opportunity to bring up sexual concerns. From these discussions two facts emerged with great clarity: 1) all patients presented evidence of psychosexual problems existing prior to the onset of multiple sclerosis; 2) in all cases the many intricate elements of the illness were effectively utilized in structuring a compromise solution for these conflicts. Chronic illness is a situation in which we frequently see the principle of the prisoner finding a use for his chains. Many other examples could be cited to illustrate how the patients put their handicaps into service in trying to cope with difficult life problems. One member of the group, a father deeply ambivalent about the oncoming wedding of his daughter, anxiously anticipated the possibility of a relapse which would prevent his giving away the bride in the ceremony.

In the therapeutic sessions, many of the attitudes of protest against the disease and unconscious exploitation of it could be discussed without too much resistance, and clarified to much advantage. Another and more significant aspect of multiple sclerosis, however, is the threat of relapse, further damage and death. Anxiety tended to block open discussion of this problem. When news of the relapse of a former fellow patient reached the group, the conversation was abruptly shifted. This is an area in which desentization must take place within the therapist first, then gradually in the patient, and only at appropriate moments. Then the initial decisive step is for the therapist to let the members become aware that he appreciates the presence of this threat and its import. Even gentle uncovering of this fear arouses anxiety which cannot be completely neutralized by defenses. Fatalism with its implicit submissiveness is one attitude manifested by all these cases on this issue. One patient drew on his war experience to express his fantasy of what the future might hold for M.S. patients. He told the story of a soldier whose spine was riddled by machine gun bullets, a chance victim of a random strafing attack. The possibility of having to accept such a fate was often avoided by various devices of denial. For example, the patients banked heavily on the hope of a curative therapy. One member liked to believe that the etiology is emotional and that the psychotherapeutic sessions were the key to healthful resolution. Another member began to worry about functional cardiac symptoms in order to mask his anxiety about the fearful aspects of multiple sclerosis. However, underlying all those attempts at denial there were signs of a deeper admission. Talk of the future occupied little time in our sessions. A day-to-day philosophy seemed to prevail. This is a point which needs further validation, but in this group the evidence was consistent.

Attitudes Toward the Therapist

Briefly it can be stated that the patients brought into the therapeutic situation an extraordinary need for an emotionally supporting person. There is collateral evidence of this from the neurologist and the social worker who were also concerned in the overall management of the cases. At times, the need found expression with unblushing directness. A very important indication was the passive attitude which members manifested in the group process itself. The directive role which the patients wished the doctor to play was clearly spelled out in the earlier sessions and reiterated at intervals. Being exaggerated, their expectations were inevitably frustrated in the group situation. The patients then experienced reactive resentment which rarely reached the level of

awareness, and generally found expression in extremely subtle derivative comments and behavior. It was important for the therapist to watch for clues of this and to initiate open discussion of this attitude. Without help from the therapist the patients would not take the risk of losing the security of the relationship with the doctor. However, with permissive opportunity at hand the feelings could be dealt with.

For extrinsic reason to be mentioned later there was a recurrent preoccupation with loss of emotionally significant people or threats of such loss. In addition, these patients demonstrated an intrinsic vulnerability to the problem of loss. This susceptibility stems from the anxiety about the possibility of future loss of somatic or intellectual function due to progression of the disease. Thus, the patient's self concept is compromised by the feeling that ultimately he will become a helpless devaluated person, unacceptable in the eyes of the person to whom he looks for his much needed support.

Attitudes Toward Each Other

Long[2] has pointed out that the patients all having the same illness serves as a unifying factor in the group and at the same time forms the strongest point of resistance to investigation of their feelings toward one another. Rivalry was apparent, but its expression could not be forced. Members avoided close involvement with each other in order to avoid pointing up their own anxieties. On the other hand the patients shared and reinforced the defenses of their fellows. One of the goals in therapy was to diminish the exaggerated dependence on the leader by utilizing the healthy elements of mutual support derived from one another. In order to foster this aim the therapist would point out, whenever possible, the contributions each member made in working through an emotionally significant issue. Also, when a member expressed a concern he would be invited to consider it with the help of a fellow member who directly or indirectly had touched on the same problem in a previous session. By these methods, it was found that patients were able to relate to each other in a more constructive way.

Discussion

It is, of course, difficult to asses the value of these group sessions within the framework of the overall medical care which these patients received. Members became a working group by all criteria of this psychotherapeutic approach. After the initial phase of group life, attendance was regular. The quality of the relationship improved. During the period under study one patient went through a phase wherein there was neurological evidence of increased disability, but subjectively he maintained much more equilibrium than during previous episodes of relapse. He discussed his anxieties in the group and carried on his employment and social contacts. The group situation served admirably for the adaptive management of other psychologically important events. Different members suffered such losses as death of father, death of mother, daughter's marriage and economic reversal without exacerbation of their illness. Therefore, the emphasis of this report is on what psychotherapy can do to help the patient with the inevitable emotional problems involved in this disease.

Conclusions

A special form of supportive yet exploratory group psychotherapy is found to be of value in the overall management of patients with multiple sclerosis, particularly in the stage of the disease here described.

As an approach toward understanding the emotional factors involved in this chronic illness, this method can supplement, confirm or question data acquired by psychiatric case study and psychological investigation.

Ideally, the group therapy should be conducted in a setting where there is neurobiological research on all aspects of the disease: etiology, natural course and somatic therapy.

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The Escaping Adolescent

ERNEST HARMS

Child psychiatry, which has had a rapid growth, has unfortunately, because of the special impulses that have guided its development, neglected some major aspects which appear most essential if it is to become a science satisfactorily encompassing the entire field. One of these is abnormality resulting from deviations from the path of healthy mental growth. Several years ago I published a first study of such psychopathology of growth, which I termed "Mignon Neuroses,"* resulting from a too-rapid and one-sided maturing which opposes the accepting of the slow normal process of learning. This paper presents a second study in this field. It is concerned with a problem that has occupied my attention for many years and which I call "adolescent escapism."

Numerous religious documents from various cultures and ages tell about young Oriental adepts, rabbinical students, or mendicant monks who, by not adjusting themselves to their communities and by moving from community to community, achieved, in the course of their wandering, a perfecting of their personalities or initiation into the religious wisdom they strove for. In the European secular culture of past centuries we have seen the young journeyman who wandered restlessly from master to master in order to "look around and learn." And if the lovely daughter of one master or the beautiful wife of another did not stop his wanderings, he detached himself again and again because of his desire for independence. These "wander years," in one form or another, are an expression of the developmental and social urge of the adolescent and young adult, a powerful inner urge to break away, avoid, and even escape from social and personal ties, with the aim to be oneself, to build one's own inner world by the aid of continuous new contacts and non-committal experiences.

Expressed in more psychological terms, it is one's own thinking and feeling and one's own pace of living that are paramount and the only measure of all other matters of "God and the world." The desire is for unboundedness which, if pressure is put upon it, withdraws or fights back, but more frequently prefers to *escape,* because it is not strong enough or feels it not worth while to "make an issue" of the matter.

Present-day Western civilization, and especially American civilization, provides no avenue for such escape by its youth, at least not in the deeper areas of the personal life. We maintain and seriously believe that we are freer than any civilization that ever existed, and that in this country everyone can do more of the things he wants to do than can people in other countries. We call ourselves a "nation on wheels," because in a car one can in minutes remove himself from an environment one does not like. Most of us believe that the education of our youth is the best and that it is adjusted to the needs of the civilization we live in, although serious doubts on this score have been expressed in the progressive ranks of our educators. If the education of our youth is adjusted to our way of life, it is only so in terms of the technocratic and materialistic phases of that life. As a matter of fact, we are concerned, and have good reason to be concerned, about our youth. There has hardly been a time when Western civilization has faced such difficulties with its offspring as it does today. Of course we make the greatest effort to "adjust" our youth. But the adjustment we attempt to make is predominantly in terms of social measures. We concentrate on family problems and problems of social relations, on finding as smooth an introduction as possible into professional life. But the closer and more urgent these problems become as our youth approaches adulthood, the more difficulties we face. These difficulties range from mental illness to delinquency and their numbers are on the rise.

One sensitive and serious sixteen-year-old representative of this youth—which has justifiedly been called "in revolt"—when asked, "Haven't you got a car and can't you get

*Harms, E.: Essentials of Abnormal Child Psychology, New York, 1953, pp. 136-145.

away from home and the 'old folks' whenever you want to?" replied, "That doesn't help. You can't get away from it that way." And when he was asked, "Aren't your parents nice to you, don't they understand you?" he answered, "They are almost too nice, but they don't understand what any of us has on his mind." And, "Didn't they give you a vocational test in school last year to help you to make up your mind what you want to do when you get through high school next year?" brought the desperate response, "What does one want with a job, besides earning some money, as long as one isn't clear about oneself?" These responses are caracteristic of those one gets from many of our adolescents. They indicate that what our modern educational concern and care is offering remains outside the area of the actual problems and struggles which are the causes of the despair and distress of so many of these young people.

The real problems are inner mental and psychological. If we turn for help to psychology and psychiatry, we find that our behavioristic and similarly oriented psychologies, which do not seriously believe in the importance of emotional and other deeper-seated experiences, are equally unable to help solve the problems of these adolescents who have definitely and clearly told us that, like their parents, these psychological guidance counselors do not understand their inner problems. The answer to why defiance, neuroticism, and delinquency result as a response to not being understood, and why all efforts to understand have so far tragically failed, is not a difficult one to arrive at: the efforts do not penetrate to the roots of the sphere of experience in which the adolescent struggles with himself and his environmental world.

At the beginning of this paper we commented on the wandering and escape pattern which in earlier times provided a healthy means whereby the youth found his way to personalization, that is, being permitted to break away from family and community relations and not getting settled down in a community until a certain degree of self-development had been achieved. There is nothing in our modern education that gives our youth a real opportunity to go through with such a personalization. Even our colleges, with their stiff, professionally-directed curricula, do not provide the "escape" for free growth. Although we may believe that we are providing "growing space," we actually are not. The result is that instead of a healthy escape from feelings of being fenced in and overpowered, we have pathologies—mental pathologies, physical pathologies in the form of illnesses, and social pathologies in the form of delinquency.

Case histories reveal that most psychopathology genetically starts during adolescence. In whatever symptomatic form it may appear, whether as schizophrenia, depression, or behavioral disorder, the seedbed appears to be the juvenile struggle against pressure and the inability to escape an unbearable situation. In most of our present professional dealings this fact has unfortunately been viewed as only a secondary aspect and not as the major aspect of the total pathological picture. To this writer, this adolescent psychological struggle has been the main aspect not only in theoretical considerations but, even more, in practical psychotherapy. This approach has proved not only an unusually successful one, but in many cases the only successful one. It calls for taking a completely different stand from that applied somewhat dogmatically today. It calls for an effort to unearth the sources of pressure—not the external, but the inner sources—and to open up the routes of escape demanded by these adolescents. This is already reaching partly into psychotherapy. However, in most cases it is at the same time diagnosis, that is, the discovery of those healthy forces and tendencies—if they still exist—that may become the basis for therapy. For many workers whose somatic thinking and diagnosis have become routinized by present common psychiatric thinking, such an approach would seem to involve a change in symptomatological aspects. Actually the approach is the same whether one is dealing with a schizoid or mildly schizophrenic patient, a depressive, or a patient with a behavior disorder. One must search for the same genetic elements, which will be found, but under different somatic stones, and one may have to apply different diagnostic tools. This diagnostic procedure is

complicated by the fact that the roots of the condition are in many cases repressed. Because of this, some kind of analytical procedure, which sometimes takes considerable time and effort, must be applied, and there will frequently be a struggle to overcome subconsciously resisting factors that refuse to give up their position. The procedure of course cannot be a characteristically Freudian libidinistc psychoanalysis; it should be, rather, something like what I call "adolescent analysis," which aims not at a sublimation and transference, but at a liberation of healthy innate forces and trends. It is not change, but reinforcement of freed personality elements that should be the scaffold of growth. Not for the purpose of offering a model, but only in order to illustrate what has already been said, I add here a case history which, while it is characteristic, will, in its details, have a different form and course in different individuals:

The subject is a sixteen-year-old boy, the only child of a well-to-do middle-class couple, born when the father was 40 and the mother 32. He was full-term and bottle-fed, walked at ten months and talked at twelve months, had the usual children's diseases and a long spell of colitis at the age of three. After he recovered from the colitis, the mother reports, he became somewhat hyperactive. He went through a period of incessant questioning and exhibited temper and destructiveness. He was a bright boy and had a great eagerness to read and write. The mother reported that at that time he started to tax her nerves considerably. When the boy was six, the marital ship entered stormy seas, and he reacted with severe "resistance spells." An apparently extrovert child who made easy connections, he began to show signs of withdrawing at the age of nine. While in tests he had registered an occasional IQ of 120, he fell more and more behind in school and discouraged friendships, preferring to be alone in detached daydreaming. The father took a traveling salesman's job so that he was at home only weekends; while on trips he drank a good deal. The mother, who was becoming more and more pathologically manic-depressive, reacted by taking a more and more authoritarian attitude towards the boy, who in turn responded with resistance and more and more withdrawal. The boy matured at about age twelve and masturbated frequently. He had no friends and watching television became his only occupation. When he wanted to escape his mother's "scenes," he visited a nearby gas station where he watched the men at work. His school grades fell lower and lower. The parents were called to school and told that the boy was not able to keep up with the class, that he should get help or withdraw from the school. At this time the boy was fourteen. After a weekend of marital cross-accuscation and scolding the boy, it was decided that a psychotherapist should be consulted.

The diagnosis was a schizoid individual on his way to a schizophrenic episode. The facts of the boy's life were presented by the mother and were the basis for therapy. It was clear that the home situation, the absence of the father, and the domineering mother were the essential pathogenic elements. Under the pressure of this situation there had occurred a kind of psychic suffocation and restraint of development. It was necessary to form some kind of positive human relationship that could be a bridge to carry the boy from the parental home.

The boy was seen by the psychotherapist every second day for 14 days in sessions of an hour or longer. In this preliminary treatment the boy responded positively. At the end of the 14-day period he was taken to a suburban nursing home, after it was explained to him that he needed to live for a while in a pleasanter environment and making him aware of the nature of his illness. He gladly accepted this "vacation" and after the first few days participated in house and garden chores. He was seen by the therapist about four times weekly. Recovery in response to the pleasant environment and removal from home pressures was rapid. He became interested again in reading and learning and found pleasure in being with other people.

Soon, however, new pathological elements came to the fore which seemingly had two sources. One was the long period of suppression in the home, which had retarded and left undeveloped certain social, emotional and, most of all, will faculties. The second source, however, was the adolescent reaction which had been complicated by the retarded development. Although there was underneath a strong desire for social contacts and mental development, any attempt that he or the therapeutic group made to build up contacts produced a flood of conflicts which resulted in withdrawal into his shell.

It was at this point that I started what I have called "adolescent analysis." This was carried out in the form of daily or every-second-day, half-hour periods of relaxing on a couch, during which the boy was asked to speak out freely, not in an unresponsive way but in relaxed discussion of his problems, and there was a working over of his conflicts. This attempt to clear inner conflicts in his social attitudes did not have the result expected, namely, that he would gradually become easier in his relationships with others, more eager to attain a normal level of learning and develop the normal interests of an adolescent of his age. Actually he became more difficult and his desire to withdraw increased. In the process of relaxing, too many suppressed factors and problems came up. At times the sessions had to be interrupted, because he was "not able to stand them." He had spells of sobbing, and needed the entire period to "get hold of himself." The desire to escape, which came violently to the fore, had to be allowed to work itself out.

The first relief appeared when the boy realized

that we understood "what he went through and felt," that we were "with him." More and more frequently he would come to me and other staff members, not to talk but only to be near someone. This "made him feel good." He would come to my office and stay for hours. At this point I made arrangements for an analytic session when he "felt he was ready."

The basis of my entire treatment was to give him as much inner freedom as possible and to allow him to work his problems out at his own pace, regardless of whether what was brought out was normal or pathological. My task, I felt, was mainly to push him slowly out of the pathological and into the normal streams of inner life.

When, after about six months, the young man began to contradict and even oppose me, I saw this as the first sign of healthy reaction and normalization. Up to that time his reactions had been either silence, a shrug of the shoulders, or a non-committal "maybe." When he displayed a contradictory attitude, it was a sign that his ego had begun to consolidate, or reconsolidate, and that he had begun to build up his inner self-existence. In this case, naturally, healthy adolescent consolidation and curative consolidation were mixed. The stronger he became, the better the fight he put up. At times I gave a humorous turn to the session. He called this "fencing."

During the last two months of a nine-month stay at the nursing home, our patient progressed further and further toward a healthy adolescent mental status. He developed a healthy way of withdrawing or escaping when upsetting experiences occurred. When he felt that he was ready to discuss things, or, to "mirror himself" in me, he would come and we would eventually have "a little fight." Now he was not only willing but eager to be with other people. It was a considerable time before he was willing to associate with young people of his own age, particularly girls. During the final two months we had also made arrangements to have him return to school. It was decided not to send him back to the original school because he was three years behind in his studies there, but to a tutoring school, where he actually made up two of the lost years. Meanwhile an attempt had been made to reconstruct the family but this proved impossible because after the boy was institutionalized the father hardly ever came home and the mother went to live with relatives. Since the father agreed to support training of the boy, we continued his supervision He had no recurrence of his mental illness but retained his tendency to be withdrawn which had apparently developed into a personality feature. He is now in the final stages of training as a chemical laboratory technician and plans later, after he has started to earn enough money, to take evening courses and become a graduate chemist.

This case may be taken as an example only of a pathological form of adolescent escapism and our handling of it is not necessarily a pattern. All these adolescents have strongly individualized characters and treatment must be individualized to be successful.

Differential Diagnosis Between a Calculated Risk and a Masochistic Action

EDMUND BERGLER, M.D.

An anecdote old before the advent of the X-ray revolves around the antics of a stubborn and ironical man in the dentist's chair. He bewails his aching tooth; the dentist asks, "Which tooth?"; the patient replies, "You tell me; you're the doctor!" The dentist points to a tooth that looks unhealthy enough to make trouble; the patient nods; the dentist extracts the tooth. After all is over, the patient triumphantly and gloatingly exclaims: "You picked the wrong tooth!" . . . Did this man take a calculated risk, or did he act masochistically?

The joke hits at stubbornness, a quality that in some people seems more important than self-preservation. The joke contains, as well, an allusion to psychic masochism: in cases such as this, pseudo-aggression constitutes only a covering cloak for unconsciously intended self-damage.

A wit could also say that the man in the joke took a calculated risk: the dentist could very well have refused to pull a tooth without precise information; he might have dismissed his patient's peculiar behavior as an attempt at humor. But—and this is decisive—the jokester failed to anticipate that the dentist would make the situation serious by lacking a sense of humor.

At this point the differentiation between calculated risk and masochistic action becomes dimly discernible. The individual who takes a calculated risk *does* foresee possible and even impossible eventualities. He weighs these and comes up with an answer that satisfies him. He may of course be wrong and his conclusion or vision faulty; often masochistic admixtures account for the error. In any case he did explore the situation by as-

sessing those eventualities that occurred to him.

In clearcut contradistinction, the individual who follows the "pleasure-in-displeasure pattern" *does not* foresee possible eventualities. He focuses exclusively on one chosen thought. In short, calculated risks more often than not carry a *minimum* of unconscious tributaries, while masochistic actions carry a *maximum* of these.

The wife of one patient had lately devoted her time to a new hobby, painting. To everyone's surprise, she showed remarkable talent. The husband, a manufacturer, liked one of her paintings well enough to hang it in his office. One day one of his important customers admired the painting, and the manufacturer presented it to him. The patient took it for granted that his wife would be flattered by the incident. When he told her about it and she bitterly reproached him for disposing of her creation without her consent, he was "very surprised." He had no defense when she went on to claim that "finally" he had betrayed his real opinion of her work—he had acted as though he were glad to get rid of the "trash." If the man had foreseen these eventualities and dismissed them as less likely than his original conclusion "she will be flattered," he would have been guilty of an error in judgment and not of a clearcut masochistic-provocative action.

Another middle-aged patient had been married for seven years to a woman who was desperately struggling against the aging process. Though only 41, she needed constant reassurance and was rather emotional on that score. She was a severe neurotic of the "injustice collecting" type. She projected the image of some infantile ogre (mother) onto nearly everybody, though her husband was her preferred target for accusations of neglect, coldness, lack of consideration and what not. Her tantrums and harangues occurred nearly every day; they would last for many hours. One day the patient and his wife were invited to a party. Another guest, the woman learned, would be an old beau whom she had not seen for 21 years. Although nervous and apprehensive of the encounter, she bravely faced the test.

Two facts should have put the husband on guard; of course, they did not. First: during his wife's romance with that beau, her mother had found the two petting, and had "literally thrown the beau out." And it was her mother who was his wife's bete noir. Second, he had observed again and again that the passage of time was no deterrent to his wife's vicious reproaches; it was "as though time did not exist for her." His wife was still keyed up after the party and he took her to a restaurant, allegedly to "quiet her." He remarked, "Forget it; it was 21 years ago." This sentence provided her with the cue for a harangue that lasted throughout their meal and continued at home until the small hours of the morning.

Had that man taken a calculated risk or was his a clearcut masochistic provocation? His action was masochistic. These were his thoughts as he prepared to make his presumably soothing remark: "It didn't even occur to me that my obvious reassurance could mean anything except consolation." Why did it not occur to him that he was hitting below the belt in stressing the passage of time, which meant that a girl of 20 had become a woman of 41? Why did he not recall that "time did not exist" for his spouse? And why did he not consider the fact that in stressing the historical aspect of the grievance he put his finger on an open wound—his wife's eternal tendency to blame her mother, a wound she desperately tried to keep open in her protracted neuroticism?

In thinking the problem through one finds that calculated risk is not so far from masochistic action as it might seem. The person intending to embark on a venture based on calculated risk does not always foresee all eventualities. All possibilities, to begin with, are not foreseeable; in addition, masochistic vicissitudes sometimes prevent the afflicted person from considering the most important facts. On the other hand, some risks are unavoidable in life. Risks *may* work out favorably; masochistic actions *cannot*. For even the minimum of precaution, in the form of working out the possibilities beforehand, is excluded when a bullheaded masochistic action is about to be launched.

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A Comparative Study of Promazine and Trifluprom azine in the Treatment of Acute Alcoholism

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Initial enthusiastic reports on the use of chlorpromazine[1,2] in the treatment of acute brain syndrome resulting from alcoholism were very appealing. These reports claimed that chlorpromazine approached the ideal agent by relieving the patient of his excitation without causing excessive depression and subsequent release effects, thus permitting the patient to aid in his own management. The introduction of promazine,[3,4] with claims that it was even more effective because of fewer complications, was another significant development in the phenothiazine treatment of acute alcoholism and its withdrawal symptomatology. The success of these compounds has led to the trial of newer phenothiazine compounds as they become available. The relative effectiveness of these compounds in the treatment of acute alcoholism remains undetermined since comprehensive comparative controlled studies are not numerous.[5]

The purpose of this study is to compare one of the first of the fluorinated phenothiazine analogs, trifluprom azine, with promazine. Such a study is of practical and theoretical import since in terms of dosage trifluprom azine is more potent and promazine less potent than chlorpromazine. The only difference among these compounds is the halogen component (see Figure 1).

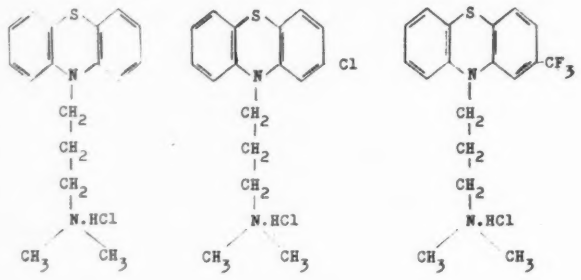

Figure 1.

Procedure:

As a preliminary phase of this study, the authors initiated a survey of the procedures utilized at this hospital in the treatment of the patient suffering from acute alcoholism. This survey revealed that the alcoholic patient was seen on admission by an admitting physician who initiated treatment orders and transferred the patient to an admission ward or to the hospital infirmary, depending upon the severity of the symptoms. (The hospital has no special alcoholic ward.) Apart from the administration of vitamins, plus 1000 cc. of 10% glucose intravenously, B complex and Insulin, usual treatment routines consisted of giving chlorpromazine in a daily dosage range of 150 to 400 mgs. or promazine in a range of 150 to 500 mgs. In the majority of instances both medications were given orally on a Q.I.D. basis. Routine specific instructions were that these drugs not be administered to comatose patients, and that patients receiving parenteral medication should have blood pressure checks 20 or 30 minutes after each injection. In those cases where exacerbations of withdrawal symptomatology occurred, treatment was further supplemented by one or two doses of paraldehyde or chloral hydrate. These exacerbations usually occurred on the second or third day of treatment.

During the initial survey period (January to May 1958), all alcoholic patients admitted were interviewed and observed by one of the investigators (F.G.). Symptomatology, course, and treatment were observed and illustrated by daily charting. There were 106 male and female alcoholic patients, ranging in age from 20-73 years. They were observed and classified on the basis of symptomatology into specific diagnostic groupings based on the classification by Noyes[6] with modifi-

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From Spring Grove State Hospital, Baltimore, Md.

The promazine used in this study was supplied as Sparine by the Wyeth Laboratories, Philadelphia, Pennsylvania.

The trifluprom azine used in this study was supplied as Vesprin by E. R. Squibb & Sons, New Brunswick, N. J.

cations as employed by Fazekas.[4] Four diagnostic entities were adopted: (a) inebriation, (b) tremulousness, (c) tremulousness and hallucinosis, and (d) delirium tremens. A fifth category was added during the course of the study: imminent delirium tremens.

Of the 106 patients 21 were not included in any category because of underlying psychoses, concurrent illnesses, etc. This was done in order to provide a paradigm for the comparative study to follow, in which such cases would necessarily be eliminated. Table I presents the categories of the remaining 85 patients and the recovery period for each category. These results are compared with those reported by Fazekas *et al.*,[4] although their patients are divided into only three groupings. The comparison indicated to us that the existing hospital procedures appeared to bring about recovery from symptomatology within the same periods of time as those utilized by others.

TABLE I

Recovery Time During Preliminary Survey (January 1958 - May 1958)

	Fazekas (4)		Spring Grove State Hosp.*	
Classification	Cases	Recovery Time (aver.)	Cases	Recovery Time (aver.)
Acute Inebriation	55	5	18	3 days
Acute Tremulousness	—	–	22	5 days
Acute Tremulousness, Hallucinosis	55	5	19	7 days
Delirium Tremens	110	7	26	5 days

*Complications: 2 deaths, one of acute heart failure; one, a diabetic, of pneumonia. Five patients suffered one or more grand mal seizures.

An attempt was then made to establish more uniform and consistent treatment for our comparative drug evaluation by establishing a plan of treatment for each category as indicated in Chart I. This dosage schedule reveals a tendency toward minimal dosages with promazine compared to those administered by Figurelli.[7] Our lower dosage levels resulted from the fact that we utilized conservative dosage levels of trifluprom azine since we were unfamiliar with the use of this drug in the treatment of alcoholism and we wished to maintain equivalent promazine dosage levels.

Patients admitted to the hospital infirmary during our study were treated by the same physician throughout (S.W.) Patients admitted on even numbered days were given trifluprom azine and those admitted on odd numbered days promazine. Initially our plan was to follow the more frequent administration of drugs as outlined by Figurelli.[7] Except in a few instances, however, this plan could not be followed because of the concern and apprehension of the treating physician (S.W.) regarding the possibility of complications with this procedure that might not be managed adequately by nursing personnel unfamiliar with the technique. In the few cases treated by this approach, there seemed to be some advantages, with no untoward reactions noted.

Rating scales were developed for evaluating the changes in symptomatology produced by promazine and trifluprom azine. These scales are presented in Chart 2 and consist of tremor, anxiety, restlessness, excitement, depression, hallucinations, confusion and somatic complaints—all graded on a five point scale. The ratings of symptomatology in all cases were performed by one of the investigators (F.G.) who made daily rounds on all the alcoholic patients and observed them throughout the treatment of the acute phase of their alcoholism.

Three months (June to August 1958) were spent acquainting the staff with the treatment schedules to be employed (Chart 1), discussing their reservations concerning our planned approaches, and holding orientation lectures in which the theoretical aspects of the project were presented and discussed. The information presented in Chart 1 was mimeographed and distributed to the physicians and ward personnel in the study.

From September 1958 to April 1959 there were 200 patients admitted for alcoholism, of whom 87 were deemed acceptable for the comparative drug study. Patients excluded were those who had already passed through their acute symptomatology, were sick in some other way, or were court orders.

Data:

The 87 patients included in the study were all white and ranged in age from 22 to 68 years, with a mean age of 44 years; 11 fe-

males and 76 males. Thirty-three were first admissions and 54 had had one or more previous admissions. As to classification, there were 18 inebriates, 28 acute tremulousness, 10 acute tremulousness with hallucinosis, and 19 delirium tremens. Twelve patients were on the verge of delirium tremens (D.T.) and, for observational purposes, were carried as a separate group. Four patients from this group who ultimately developed delirium tremens were added to the D.T. group, which raised the number in this group to 23 patients. As an artifact of our alternating drug selection procedure, we arrived at slightly different numbers for each drug category—47 patients were treated with triflupromazine and 40 with promazine.

Table II shows the treatment, duration, and side effects in the various diagnostic categories. The comparability of the results is evident.

At fairly equivalent dosage levels (triflupromazine's average daily dosage slightly less than one half that of promazine) both of the drugs demonstrated approximately the same recovery rates and both required additional paraldehyde treatment in extreme cases. No differential drug effect (triflupromazine vs. promazine) was noted in those cases where the titrating procedure of Figurelli was utilized.

For statistical purposes the 47 triflupromazine and 40 promazine patients were then divided into D.T. and non-D.T. groups. The delirium tremens groups (15 trifluprom azine and eight promazine patients) were handled separately since adjunct chemotherapies aimed at alleviating target symptomatology were at times used with these groups, and because the extreme severity of symptomatology found in these groups set them apart as logically distinct from the others.

Statistical analyses of change in symptomatology as measured by the rating scales in Chart 2 were performed for those 32 patients in each drug group who did not develop D.T.'s. Table III presents the number of non-D.T. patients showing ++ or greater symptom manifestation before the administration of drugs and at second and fourth days of treatment. The numbers presented are from a total possible number of 32 patients for each drug category, with the remaining patients obtaining 0 or + ratings.

The similarity of reactivity for the two drug groups is immediately evident from the table. All the symptoms had alleviated markedly by the first two days, and by the fourth day very little target symptoms remained. Both drugs were found to relieve symptoms to a statistically significant extent, but no significant differences could be found between the two drug groups by means of covariance techniques (when conditions warranted their use) and nonparametric tests. Except for mild anxiety appropriate

TABLE II

Comparative Study (Sept. 1958 - May 1959)

	Cases		Aver. Daily Dosage		Recovery* (days)		Side Effects	
	Sparine	Vesprin	Sparine	Vesprin	Sparine	Vesprin	Sparine	Vesprin
Acute Inebriation	8	10	230 mg.	110 mg.	1-2	1-2	Dizziness (1)	Hypotensive
Acute Tremulousness	15	13	220 mg.	108 mg.	4-7	4-7	Drowsiness (1) Blurred Vision (1)	reaction (1)
Acute Tremulousness and Hallucinosis	6	4	250 mg.	120 mg.	4-7	3-6	Dizziness (1)	
Imminent Delirium Tremens	3	5	280 mg.	140 mg.	3-4	3-5	Lightheadedness (1)	
Delirium Tremens	8†	15‡	330 mg. (A)	155 mg. (B)	3-7	2-7	Dizziness (1) Relapses (2)	Relapse (1) Convulsions (2)

*Recovery defined in terms of overall alleviation of target symptomatology.
†Includes case originally grouped with Imminent Delirium Tremens.
‡Includes three cases originally grouped with Imminent Delirium Tremens.
A—In addition to phenothiazine, paraldehyde was administered in 4 cases.
B—In addition to phenothiazine, paraldehyde was administered in 8 cases.

to the stress of hospitalization and minimal tremor in test situations, complete symptom alleviation had occurred for most of the 32 patients in each drug group by their last

TABLE III

Non-Delirium Tremens Patients Showing ++ Or Greater Symptom

	—Vesprin—			—Sparine—		
	Pre-Treatment	Day 2	Day 4	Pre-Treatment	Day 2	Day 4
Tremulousness	28	16	2	30	18	2
Anxiety	31	15	3	32	22	5
Restlessness	18	0	0	16	0	0
Excitation	18	1	0	13	1	0
Hallucinations	5	0	0	6	0	0
Depression	7	3	1	17	12	1
Confusion	7	0	1	5	0	0
Somatic Complaints	4	1	0	11	3	0

N=32 in each drug category.

treatment day (from 4-7 days). As an example of the extent of this alleviation, only one trifluprom azine patient was rated as still manifesting "moderate anxiety," "mild tremor," and "mild depression" at the end of treatment and another as showing "moderate anxiety" and "moderate somatic complaints." Results with promazine were equally striking, with only one patient showing "marked anxiety" and "mild depression" at the termination of treatment. Two other promazine patients were rated as having "moderate anxiety," another as evidencing "mild tremor," and a final patient as having "moderate somatic complaints."

Symptom alleviation for the delirium tremens groups was more gradual. By the fourth day some degree of symptom alleviation had occurred, aided in part by adjunct therapies, but not nearly to the extent as in the non-D.T. groups. All of the patients in the D.T. drug groups were kept on medication for seven days except three trifluprom azine patients who no longer needed medication after five days and two whose medications were discontinued after two and four days respectively because of complications. Statistical analysis of the changes in symptomatology from the beginning to the end of treatment for the 13 trifluprom azine and eight promazine patients who remained in the study at least five days revealed quite similar results with both drugs.

A certain amount of amelioration had occurred in the eight target symptoms for all of the D.T. patients in both drug groups by the last day of their treatments. Symptom ratings for both groups had changed to a statistically significant extent, with only a few patients receiving final ratings of ++ or +++, but again, no differences could be noted between the two groups (Fisher's exact probability test). An analysis of individual higher ratings (++ or greater) revealed that one trifluprom azine patient was rated as having "moderate tremor" at the cessation of treatment and another as having "mild tremor." The remaining trifluprom azine ratings were either + or 0. Two promazine patients were rated as showing "mild tremor," "moderate anxiety," and "hyper-irritability." Three additional promazine patients received ++ ratings on their last day of treatment, one being rated as having "mild tremor" and two others as possessing "moderate anxiety." As with trifluprom azine, all of the other promazine patients received + or 0 ratings.

No serious or lasting side effects were noticed in either group of patients. Dizziness, drowsiness and light-headedness were occasional complaints in patients treated with promazine as well as in those treated with trifluprom azine. Transient drops in blood pressure were observed in four patients on promazine, whereas trifluprom azine seemed to have a more vacillating effect on the diastolic blood pressure. None of these occurrences led to any subjective complaints. Sharper drops in blood pressure occurred only in one patient who had previously suffered from hypertension; however, here again there were no ill effects. Only one patient on promazine complained of dryness of the mouth. Aside from that there were no gastrointestinal disturbances. As a matter of fact, most patients who had nausea or vomited were quickly relieved by either promazine or trifluprom azine. There were no deaths. Even the one patient who was critically ill during the height of the D.T. recovered.

While convulsions occurring in the course of acute alcoholic brain syndrome are gen-

erally recognized as a withdrawal symptom, it is necessary to be on the alert for convulsions that might occur as side effects of phenothiazine derivatives. One acute tremulousness and one D.T. patient suffered one convulsion each prior to treatment with promazine and trifluprom azine respectively, with no further seizures occurring after the drugs were started. Two D.T. patients treated with trifluprom azine had one and two convulsions respectively on the first day of medication but no more on continuation of the drug. All these reactions could be considered to fall within the range of genuine withdrawal seizures. For two other cases treated with trifluprom azine, however, the convulsions noted were considered as the possible side effects of treatment. One of these patients suffered two seizures on the third day of treatment with trifluprom azine and was taken off this medication and placed on Dilantin and phenobarbital, yet suffered another convulsion on the fourth day. The other patient, whose trifluprom azine was replaced by Dilantin and phenobarbital because of three additional seizures on the second day, was readmitted six weeks afterwards and treated successfully with trifluprom azine.

It is felt that the small number of seizure occurrences reported above does not warrant differential judgment of the drugs. Many more cases would have to be observed and EEG data obtained before differential evidence would indicate some trend. An excellent review of the recent literature[8] reveals that most investigators have also been reluctant to offer definitive conclusions on this same matter.

Discussion:

From the above results it is apparent that, as a rule, mild to moderate manifestations of the acute brain syndrome resulting from alcoholism responded promptly to either trifluprom azine or promazine. In addition to dosage of drugs, cases of severe delirium tremens often required additional sedation, administered as paraldehyde in one to two doses, before the disturbing symptoms subsided. In terms of dosage, trifluprom azine *per se* is a more potent drug than promazine since only half the dose of trifluprom azine was necessary to achieve the same effective-

CHART 1

TREATMENT SCHEDULE

Patients admitted on odd numbered days—Sparine Patients admitted on even numbered days—Vesprin

	Sparine (Promazine)	Vesprin (Trifluprom azine)
Acute Inebriation and Acute Tremulousness (Procedure No. 1)	100 mg. i.m. or p.o. initially followed by 50 mg. p.o. q. 4-6 hours depending upon response.	20 mg. i.m. or 25 mg. p.o. t.i.d. or q.i.d. depending on response.
Acute Tremulousness and Hallucinosis (Procedure No.2)	100-150 mg. i.m. or p.o. initially, followed by 100 mg. orally q. 4-6 hours.	40 mg. i.m. or 50 mg. p.o. t.i.d.
Delirium Tremens (Procedure No. 3)	100 mg. i.m. If after 1 hour excitation and restlessness have not lessened, the i.m. administration of 100 mg. may be repeated. If necessary it may be given every hour up to 5 times or 500 mg. total.	40 mg. i.m. If after 1 hour excitation and restlessness have not lessened, the administration of 40 mg. may be repeated. If necessary it may be given up to 5 times or 200 mg. total.
	If the patient goes to sleep after the second or third injection, but awakes after several hours showing again marked signs of excitation the i.m. administration of 100 mg. may be resumed until 500 mg. dosage for the first 24 hours is reached.	If the patient goes to sleep after the second or third injection, but awakes after several hours showing again marked signs of excitation, the i.m. administration of 40 mg. may be resumed until 200 mg. dosage for the first 24 hours is reached.
	If initial dose of 100 mg. induced sleep, 2 more injections of 100 mg. at 4-6 hours interval might be adequate and bring the total dosage for the first 24 hours to 300 mg.	If initial dose of 40 mg. induced sleep, 2 more injections of 40 mg. at 4-6 hour intervals might be adequate and bring total dosage for first 24 hours to 120 mg.
	Oral doses of 100-150 or 200 mg. may be administered t.i.d. depending upon the response.	Oral doses of 50-75 or 100 mg. of Vesprin may be administered t.i.d. depending upon response.

ness as promazine. There appears to be no significant difference between the drugs, in the dosage used, as far as therapeutic results achieved and complications observed. These findings seem to complement those of Laties *et al.*[5] who found no difference between chlorpromazine and promazine in the management of delirium tremens. Whatever differential metabolic characteristics occur as a result of the structural modifications of these derivatives seem to result in very little differential reactivity in terms of clinically observable symptom alleviation.

Admittedly our choice of drug dosage levels for our comparative study was somewhat conservative. On the basis of his experiences, Figurelli[7] recommended an initial dosage of promazine of 200 to 300 mg. given intramuscularly and a second injection of 100 mgs. within four hours or less. He then recommended oral administration of 100 mg. four times a day thereafter for maintenance. In his report on the use of triflupromazine in acute alcoholism, Kissen[9] also used higher dosages than those employed in this study and reported highly favorable results. Kissen administered 100 mg. triflupromazine orally followed by 50 mg. every four hours for the next 24 hours and 50 mg. four times a day for the rest of the period of treatment. Despite this dosage the latter investigator sometimes found it necessary to administer sedation in addition to the triflupromazine during the first day of hospitalization to 34 out of 126 patients. Both of these investigators seemed to feel that this approach speeded up the time of recovery and decreased the incidence of compli-

CHART 2

Symptom Grading

Tremor

Marked: general-continuous	++++
Moderate: extremities	+++
Mild: on spreading fingers	++
Minimal: in test situation	+
None	0

Anxiety

Extreme: panic	++++
Marked: restless, fearful, pressure of speech	+++
Moderate: slightly restless and fearful	++
Minimal: calm: fear appropriate to stress situation	+
None	0

Restlessness

Extreme: with violent and destructive tendencies	++++
Marked: inability to lie or sit still: stop talking	+++
Moderate: pacing	++
Minimal: occasional hyperactivity	+
None	0

Excited Mood

Extreme: panic	++++
Excitement: noisy, restless, destructive	+++
Hyperirritability	++
Euphoria	+
Calm	0

Depressive Mood

Marked Depression	++++
Agitated Depression	+++
Mild Depression	++
Apathetic	+
Calm	0

Hallucinations

Actively hallucinating with belief in their reality and responding to them	++++
Hallucinations but their reality doubted	+++
Transient episodes of hallucinatory activity	++
Misinterprets sounds and objects	+
Not hallucinated	0

Delusions (too seldom used for analysis)

Severe: entire thought content distorted by delusions	++++
Marked: many delusions without distortion of thought process	+++
Moderate: delusions in specific areas	++
Vague: occasional delusions, patient doubtful about their reality	+
None	0

Confusion

Severe: incoherent, irrelevant	++++
Marked: disoriented, misidentification, memory defective	+++
Moderate: partial disorientation, misidentification, memory gaps	++
Minimal: spotty memory	+
None	0

Somatic Complaints

(nausea, gastrointestinal disturbances, dizziness, insomnia, and other physical complaints)

Severe	++++
Marked	+++
Moderate	++
Minimal	+
None	0

cations. As an indirect result of our own study, in which a comparatively low dosage schedule was utilized, a baseline has been established against which a high dosage approach could be compared at a later date.

Another interesting point of departure for further study has to do with those delirium tremens patients in whom there was a recurrence of symptomatology two or three days after treatment had begun. Do these patients possess metabolic differences in the rate of absorption and excretion of the phenothiazine drugs that result in some type of shunting effect on the therapeutic process, or do they have certain deficiencies or toxic conditions unrelated to the drugs that explain this relapse phenomenon such as a magnesium deficiency as indicated by the studies of Mendelson et al.?[10] If this is so what does paraldehyde contribute which the phenothiazines by themselves are unable to do? It would be of interest to determine whether or not detailed psychological and biochemical studies of such reactors would provide any correlative information.

Finally, it is quite apparent that the comparative study reported here has certain limitations, the most serious of which is the lack of the use of a double-blind technique. Such a technique was initially considered, but deemed inadvisable because of the complexities of the clinical setting and the absence of a special unit devoted exclusively to the treatment of the acute alcoholic. The relatively small number of patients and the comparatively low dosage levels utilized are also limiting factors. As a result of the experiences gained in this study, we would emphasize strongly the need for a special setting for research on the patient suffering from acute alcoholism and its withdrawal effects.

Summary:

Eighty-seven newly admitted alcoholic patients manifesting symptoms of acute brain syndrome were divided by an alternating selection procedure into two groups of 47 and 40 patients each. One group was treated with trifluprom azine and the other with promazine according to prescribed treatment routines for the various diagnostic sub-categories. The patients were observed during the acute phase of illness and rated daily by the same observer on eight withdrawal symptoms. The incidence of complications was also noted. Results indicated that patients with mild to moderate symptom manifestations responded promptly to both drugs, with no significant inter-drug difference noted. Patients with delirium tremens responded less promptly and, regardless of drug, additional sedation was required in at least half of the cases. Complications resulting from both treatment procedures were approximately the same and not serious in any group.

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Report on a Phenothiazine of High Clinical Potency

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We have previously reported our experiences with (N-N-dimethyl-10-[3-methyl-4-piperazinyl)-propyl]-2-phenothiazine sulfonamide dimethanesulfonate)[1-2] in the treatment of acute and chronic female psychotic patients in the research ward of this hospital. The present final study deals with 46 patients who had been rehospitalized between two and 15 times; 39 were schizophrenics; 35 were between 30 and 49 years old. They had received during the present or previous stays between one and 11 different kinds of treatment (chemical, physiological or cerebro-surgical). The duration of hospitalization before the present treatment varied from one day to 23 years (Table I).

TABLE I

Duration of Hosp. Before Treatment	M.I.	Imp.	Sl. Imp.	Unc.	Worse
1- 3 months	7	3	5	6	–
3- 6 "	–	2	–	2	1
6-12 "	–	1	1	1	–
1- 3 years	2	2	4	3	–
3- 5 "	–	–	–	1	–
5- 7 "	–	–	–	–	–
7- 9 "	–	–	–	1	–
9-12 "	–	1	–	1	–
12-15 "	–	–	–	1	–
> 23 "	–	1	–	–	–

M.I.—Much improved; Imp.—Improved; Sl. Imp.—Slight improvement; Unc.—Unchanged.

The patient sample was both selected (those who had not responded to any previous treatment), and unselected (recently admitted acute relapses). The main symptoms were psychomotor agitation, aggressiveness, anxiety, tension, delusions, hallucinations, disorganized thinking, withdrawal and apathy.

The initial dose was intramuscular in 25 patients ranging from 0.5 to 3 mg. t.i.d. The oral form was given to the others (5-20 mg. t.i.d.). As of March 15, 1959, the average dose was 20-40 mg. t.i.d. orally, with a range from 5-100 mg. t.i.d. (Figure 1).

The shortest period of treatment was one day and the longest 151 days (Table II). There were 29 different kinds of side effects (Table III). Jaundice occurred in a 30 year old catatonic schizophrenic on the 24th day of treatment at a dose of 40 mg. t.i.d. The blood chemistries have been noted before.[1] The liver was found to be tender and two finger breadths below the right costal margin. Five days after the onset of scleral ic-

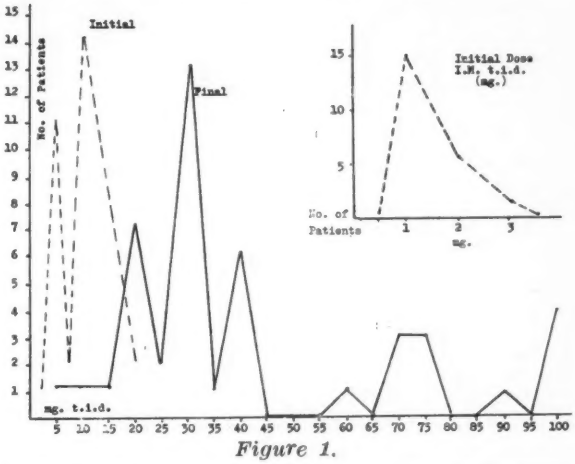

Figure 1.

TABLE II

Duration of Treatment

To 13 days	7
14-29 days	3
30-59 days	13
60-89 days	10
90-119 days	2
> 120 days	11

TABLE III

Side Effects

Tremors	30	Pain in extremities	3
Musc. rigidity	25	Lassitude	3
Motor restless.	20	Tension	3
Nocturnal restless.	16	Insomnia	3
Drowsiness	15	Dizziness	2
Blurred vision	9	Weakness of extrem.	2
Excess. perspiration	9	Headaches	2
Anorexia	6	Jaundice	1
Hypersalivation	4	Others	11
Dehydration	4	None	5

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terus, the stools were pale yellow and temperature rose to 101 F., although there were no subjective complaints. The fever fell five days later and the scleral jaundice lasted about two weeks, gradually disappearing while the liver functions returned to normal.

Although small doses of the drug were used, it was found that higher amounts were necessary to achieve a therapeutic effect. Nevertheless, six patients receiving between 150 and 300 mg. daily showed no change; five of these were chronically ill.

The symptoms in the acute cases cleared rapidly with agitation stopping in a matter of hours. In some cases, an acute confusional state was completely cleared in 72 hours. Ideational symptoms (delusions, hallucinations, ideas of reference, etc.) took longer to disappear. In chronic cases, at least two months of treatment was necessary before noting any clear-cut changes which could be attributed to the drug and not to the supportive social structure. The results were as follows: Much improved—9; improved—20; unchanged—16; worse—1.

The "syndrome d'imprégnation"[3] was observed early with increasing muscular rigidity, restlessness, incessant need to walk, drowsiness, excessive perspiration, inversion of sleep rhythm, etc. The dose at which this occurred was variable, but thin patients required much less than others. Intensive treatment with anti-Parkinson agents was used to counteract these symptoms.

There is a certain hysterical element involved in the production of side effects. Three patients developed torticollis and dystonia-like movements almost simultaneously, although only one was receiving the drug. Many patients will attempt to avoid medication in view of the rather dramatic side effects. Severe anxiety can appear as a reactive symptom to the side effects or when patients observed others in this state. These secondary phenomena frequently approach a panic state and should not be confused with the primary symptomatology. The former are best treated by group therapy and were frequently discussed in the general ward meetings.

It can be predicted that patients who overreact with marked somatic complaints to various drugs may show a severe reaction to this compound. The patient who became worse developed a panic reaction after several days, subjectively appreciating the drug as incapacitating, and rendering her powerless in relation to threatening environmental stimuli.

Case Reports

Case 1: Y. L., a 50 year old catatonic schizophrenic was hospitalized for 15 years during which time she received ECT, insulin and seven different drug treatments, without improvement. She was untidy, confused, restless at times, preoccupied, withdrawn and disinterested. After 65 days of treatment with a maximum dose of 75 mg. t.i.d., her condition remained unchanged.

Case 2: F. T., a 40 year old paranoid schizophrenic patient, hospitalized continuously since 1935, was treated with seven different drugs, without success. She dressed poorly, was restless, hallucinated, irrelevant, incoherent and agitated at times. Between 10-15-58 and 1-8-59, the dose was raised progressively to 70 mg. t.i.d. She became more relaxed, friendly, stopped hallucinating, and was finally able to go to the city for a visit—the first since being hospitalized. At present she works in the ward rehabilitation workshop.

While improvement was related to duration of hospitalization before the present treatment, it is of interest that eight patients in the 1-3 year group as well as two very chronic patients showed various degrees of improvement (Table I).

The white and red blood counts were unaffected during the course of treatment. The total cholesterol showed a definite rise during the course of therapy and reached a maximum of 501 mg.% in one patient. Its exact meaning is being studied. The cephalin flocculation rose in 22 patients without any concomitant changes in other liver chemistries (bilirubin or thymol turbidity). The significance of this change is not understood.

Discussion

This highly potent drug is of interest because of its action in patients hitherto resistant to many other therapies. Eleven patients manifested various degrees of improvement, although they had received from five to 10 different types of treatment before.

The severity of the neuromuscular reaction is such that judicious medical and psychological measures are needed. The data do not allow any inferences with regard to the still unsettled relation of extra-pyramidal reactions to clinical result. Certainly attenuation of these symptoms does not materially affect the end result.

Although the icterus could be a manifestation of viral hepatitis, there were no apparent contacts on the ward and the patient did not manifest any of the usual subjective complaints, such as severe fatigue, nausea, anorexia and headache. These liver chemistries can be seen as well in cases of obstructive jaundice. While the weight of clinical evidence is suggestive of a drug-induced jaundice, the picture is not conclusive. It is interesting that another piperazine phenothiazine prescribed 11 days after the onset of jaundice had no effect on the physical symptoms or liver functions.

Conclusion

This phenothiazine with a sulfonamide radical at the number two position can be distinguished from other compounds used in the treatment of acute and chronic psychoses by the rapidity of its action, the unusual side effects, and the therapeutic results achieved in hitherto treatment resistant patients. Its high clinical potency necessitates *daily* medical and nursing observation.

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The Magic of Listening

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It is said that an origin of words was in the imitation of sound—a "magic" attempt to master the sound-making object. In primitive times repetition and rhyming were long thought to be effective strategies against the threat of other sounds and words. Sounds and the din of chatter were first used to keep evil spirits away. Many of us will hum and whistle when we are alone in the dark.

According to Bronislaw Malinowski,

"the main principle of magic belief is that words exercise power in virtue of their primeval mysterious connection with some aspect of reality . . . and the authority of spell-words is thought to have originated side by side with animals and plants, with winds and waves, with human disease, human courage and frailty."[1]

However the concept in the language of magic arises not because words are conventional symbols of non-verbal facts, but because we who are listeners believe the word to be capable of casting a spell on an actual object and therefore of having power in itself. One might almost define such words as the seeds of word magic in which the name gives power over the person or thing it signifies.

In verbal magic we find implicit the belief that the statement or the utterance is able to influence situations. The person, the thing or the word which possesses the magic power is in itself able by its mere expression to produce the effect of magic and of the supernatural. For instance, the word "lizard" and the actual creature are felt to be one and the same thing because they arouse in us the same reactions. Levy-Bruhl explains in his book, *How Natives Think,* how primitive logic works on such a principle: the creature frightens us; the word when listened to frightens us; i.e.—the creature and the word are felt as being one and the same, thereby establishing a "mystic connection between the two."

Magic was once used among the Trobrianders in their primitive ceremonies designed to bring about the growth of plants. An accredited magician having received a sequence of words, i.e. a spell, would then use it in well-organized ritualistic fashion.

During the numerous rites of growth magic the voice is made to sweep the soil of each plot and thus reach the tubers underground, the growing vine and its developing foliage. . . . In every act

> the magician's breath is regarded as the medium by which the magical force is carried. The voice—and let us remember it must be the voice of the accredited and fully instructed magician, and that his voice must correctly utter the words of an absolutely authentic spell—"generates" the power of the magic. This force is either directly launched on the earth or the tuber or the growing plant, or else it is indirectly conveyed by the impregnation of a substance, usually herbs, which is then applied to the object to be affected: the earth, the saplings, the kamkokola or the harvested taro or yams.[2]

In this example, as Malinowski points out, there is a definite connection between the word and the implied magical meanings which people give to them during the process of listening.

Words and sounds have a hypnotic and mystic effect upon our ears. In certain psychic phenomena such as those grouped under the heading of telekinesis, we find included movements of objects which are caused by the presence of a medium rather than through any force known to normal science. Tables tilt and are elevated, objects are thrown about, tambourines are fingered. Another set of phenomena includes clairvoyance and clairaudience. In all of these the observer is dependent solely upon the word of the medium who sees and hears things unseen or unheard by the observer. In more complex manifestations the medium goes into a trance-like state and then talks, often using different voices which ramble on disconnectedly, give advice, answer questions while professing to be voices of deceased persons delivering messages from the spirit world. Some media supposedly have revealed secrets not known to any living person but their hearers and their "controls." This they accomplished by the use of such intimate names, memories, or personal turns of thought and speech that they frequently satisfied those present that they were in contact with the spirits of deceased friends and relatives. The talking medium is, however, only one method through which communication with the spirits and ghosts is made.

The development of mediumship often begins with rappings and the movement of articles of furniture. Next the rappings are codified—some signifying yes, others, no. Usually there is the forming and spelling out of words by means of an alphabet of raps. As the seance continues to speed the process, the spoken word is used. The communications may be made by writing in which the experimenter thinks of something and his hand writes automatically. A host of experiments carried out in the 1800's by Pierre Felix Janet and others show that, far from being evidence of communication with a spirit world, these were but the normal channels for the outpourings of the operator's own subconscious mind.

The Child's Use of Magic

The term "magic gesture" was first used by Ferenczi to describe one aspect of a baby's attempt to grasp reality via omnipotence. It represents the third of the infant's four stages in acquiring a sense of reality. This is the stage in which the child gives signs—in sucking movements of his mouth, the stretching of his hands toward objects, etc.—and misconceives the response of his environment as the result of his own omnipotence.

Words and magic were once one and the same thing and today words still retain much of their magic power. The achievement of the faculty of speech is experienced by a child as the acquisition of a great power which turns the "omnipotence of thought" into the "omnipotence of words." Consequently his earliest use of words is a charm directed toward influencing and forcing the external world to do those things that have been conjured up in words. He learns both to use and listen with respect to the omnipotence of words. His speech, so he discovers, becomes an instrument for the mastery and manipulation of his environment. He further discovers that if he can persuade and influence others to listen to him and be at his command, he will invariably receive affection and reassurance.

Early in his development, the child begins to recognize the importance of having his parents pay attention and listen to him. His mother becomes the more patient and sympathetic listener and so she is experienced as a "magic helper." He begins to recognize the mastery and power of his magic gestures and how to use these effectively—until the day when reality itself proves him wrong.

As the child grows and develops, he is even more dependent upon the magic of words. Although his intellectual processes are concrete and even animistic, the six-year-old is susceptible to semi-abstract symbols, charms and conjurations. He is greatly influenced by adult authority. For example, witness the modern version of primitive magic wherein the incantatory parent counts 1-2-3-4-5-6- with the understanding that when the magic 7 is uttered the agreed upon action will be carried through by the obedient child. In most cases the magic works. This procedure is based on pure suggestion and guillibility. The deliberate counting may be shortened or lengthened to suit the child's needs, thus giving him a support and an opportunity to mobilize enough energies of his own to make the proper adjustment.

The six-year-old, according to Gesell and Ilg,[3] vacillates between two choices, the "good" and the "bad" in himself and his acts. He fears being rejected, and this leads him to search for constant approbation from his mother or to look to his "magic helper" in the control of his naughtiness. "Badness" separates him emotionally from his mother and this he wants to prevent at all costs. As he sees it, he can do nothing "bad or wrong" as long as he listens to and obeys her. For what purpose parents if not to determine allowed and forbidden things?

At the age of six, a child's interest in magic is strong. He plays that he is magic, has magic ears, uses counting as a magical maneuver, and adheres firmly to his sense of omnipotence. By the time he is eight, his belief in magic diminishes and his interests in this area become more objective. He does not believe as much in his omnipotent structure, is more aware of his surroundings, and is able to verbalize ideas and problems. He is also becoming less self-centered, uses his ears to listen more objectively. His listening as a whole becomes less magical and more realistic in nature. By the time he is ten years old, he has an increasingly realistic conception of the world, does not resort as much to fairy tales. He begins to emerge as an independent and critical thinker whose language and hearing are used as tools of communication. His radio and reading interests increase, listening becomes highly selective, and he acquires an extended use of code language.

The child now employs words as a part of his strategy of control, believing that through expression of the suitable word he can gain power over the object it represents. Children believe that magically they can change the external world with words in the same way that psychotics do with their self-coined words. Every creator, as Meerloo states, "has a feeling of power over what he depicts; he feels himself to be magician and sorcerer. Infantile thoughts always contain this element of magic control of reality, for the infant is not yet capable of abstraction."[4] The child thinks that, by knowing the name of the object to which he refers, he can control, understand or manipulate it to suit his own needs. By verbalizing the name he can act on the thing, and, similarly, by changing the name he can change the thing. The thing then, to his way of thinking, is its name. The concept of the name as an abstraction comes much later.

As the child matures, he accepts to a continually greater degree the omnipotence of words and thoughts. To listen to or to speak the right or the wrong words comes to have significant importance. He learns, as do primitives, that he too can resort to the strategy of commanding his world with symbolic actions and words. He learns that words are powerful and destructive and should be used with care and discretion. Each word uttered may carry a "life or death significance."

The Logic of Superstition

Magic beliefs and practices originated not out of thin air but because of man's inner need to feel protected or secure against imagined threats to himself. These were the result of feared experiences actually lived through in which man received by chance a revelation of his power to attain the desired end and to communicate these same experiences to others.

Superstition is, in essence, a surviving trend—or hang-over—of ways of thinking belonging to earlier stages of human development. As Jastrow says, "Superstition is crude, primitive, ignorant, dominated by fear and wish; it belongs historically and logi-

cally in a world in which magic, not science, prevails, in which things happen in ways mysterious and little understood."[5]

Men were never content merely to observe signs, to read omens of good or ill luck. They had to go on to invent various devices and forces for control. Thus charms, amulets and the complicated systems of witchcraft came into being. For example, in wishing the death of your enemy, you could, if you lived in days of yore, "make an image of his person, secure a lock of his hair, or the parings of his fingernails, or a piece of his clothing, and then stick thorns into it, burn it, torture it, bury it—all in the expectation that these injuries would befall your enemy."[5] This then was your magical procedure.

Natural forces personified became gods, rulers of earth and sea and sky, dispensers of human fate in superhuman fashion. Men regarded them with fear and religious awe, their ill will to be avoided, their good will sought, their intentions ascertained. To communicate with these forces and to invoke them necessitated a special art and out of that need developed the go-between or priestly medium who was a magician or sorcerer. He had the unique ability in the use of charms and secret controls and his magic powers for evercising these forces at will on whomsoever he wished. We all have heard of the influence of the medicine man in certain primitive tribes and of his power to remove an "evil eye" or break a spell cast upon an ill-fated man.

The language of superstition implies very little logic or reason, yet we have used it for centuries. Consider some of the following popular survivals: when you have not been affected by illness over a period of time, you rap on wood; when you sneeze, someone says "God bless you." You cross your fingers before an examination or a competitive attempt, or before asking for a raise. If you accidentally walk under a ladder, you cautiously and anxiously retrace your steps backward. If you spill salt, you toss a pinch over your left shoulder; or, if you don't want to hear about some dire thing probably happening, you say peremptorily, "Don't say it —you'll make it happen!"

The notion that words have power over realities and life-facts is a negative concept of language. By automatically conforming to, and listening to, and believing that there is some mystical power in language, we find ourselves confronted with problems of misevaluation. Words in themselves are not unique but only refer to objects, situations and feelings as such. They do not contain inherent magical or invested powers of authority. Man himself, because of his cultural habits and his mode of listening, has introduced this system of misevaluated interpretation. The following illustrates the evil power given certain words in distant places:

> The natives of Madagascar are reluctant to speak of lightning; the Baziba never mention earthquakes; rain is not mentioned by name in Samoa; fire is not named in China where there is a risk of conflagration; the ancient Scandinavians also observed the same precaution, and they did not use the ordinary word for water while making beer, lest the brew should turn out flat.[6]

Social Taboos on Words

The correct or proper word or the soothing expression attracts and charms listeners. In contadistinction, vulgar, dirty or expressive words are to be avoided at all cost.

We have a tendency in our culture to feel that certain words have different musical effects, while others are too "ugly" or "strong" for our ears. We place affective connotations on certain specific words which in turn act as verbal taboos and provide obstacles in communication. For instance, we make all sorts of attempts magically to change and to replace the evil, the undesirable, the negative, the dangerous expression, by "good" words so that what we say will make the content more acceptable in itself as well as to our listeners or readers.

A euphemism is the substitution of inoffensive or mild expression for a word or phrase that may offend or suggest something unpleasant. Their use in a substitution is one way in which we attempt to protect ourselves from the painful aspects of reality. By closing our ears to anything unpleasant by changing it into softer, more acceptable terms—a magical maneuver widely used in our society—we manage to allay and subdue the tone of sounds or words having strong affective connotations. Some of our verbal taboos, especially religious ones, originate in our belief that the names of gods are too

holy to be heard or spoken. However not all verbal taboos can be explained by word-magic. According to some psychologists, our reluctance to discuss certain areas of sex and bodily functions is due to the fact that we all have certain areas of inhibition which are so distasteful that we do not like to admit their presence even to ourselves. Because we fear having our illusions of being right and proper disturbed, we try not to listen to words which remind us of these.

In the Victorian era—and almost as much today—words having to do with sex had a strong resistance value. We have a tendency to change the subjective meaning of obscene words or other affective terms by the particular context or emotional coloring we give to them at the time of listening. For instance, for some reason we feel it socially permissible to use certain expressive "dirty" words when we are with friends or acquaintances; yet when we are with others, the use of the same words will have a prohibitive connotation. In place of a simple word like toilet, we use such terms as rest room, lavatory, lounge, "He" or "She" room. We also use formal anatomical terms, such as intercourse, penis, vagina, defecate, urinate, in place of certain simpler and more expressive terms which most of us know but reject because of a kind of public censorship and the numerous and complicated verbal taboos placed upon us in our society.

Social-wise it is also more polite and soothing to the ear to say expectorate instead of spit, inebriation rather than drunkenness, to pass away or depart rather than to die, retire than go to bed. Most of us use these verbal stratagems not merely to give different names to things, but because these words when spoken have strong affective connotations too painful to the average ear.

Aside from words with sexual meaning, we find words with strong affective connotations in many social areas—racial, national, religious and political. For example, the word red or communist immediately registers in many of our ears a feeling of antagonism and contempt and may even suggest that the person so labeled should be jailed, punished or prosecuted. In still others who have strong prejudices and fear admitting these prejudices to themselves, the substitution of makeshift words gives them a protective wall behind which they can hide their real feelings.

In our mass-conscious radio, television and movie industries, there is a serious concern about avoiding words which might prove embarrassing or forbidden to the ear drum. Any form of profanity, obscenity or blasphemy is considered reprehensible and as such its utterance is forbidden. Words like "bowels," "damn," "hell," "God," "Lord," "Jesus," "Christ"—unless used reverently, "broad" as applied to a woman, and many other such similar so-called prohibitive terms are condemned. All of these are words we all know and use in our everyday conversations, yet they would shock and embarrass us should they be mentioned in these mass media.

In short, the use of magic in language produces destructive and adverse consequences to our personalities as a whole and leads to a distortion of life-facts. It also places the burden of emphasis in communication on irrational premises and not actualities. If we would listen effectively, it is essential that we evaluate our words in their true context and not give to them supernatural magic powers. Man must ultimately discard the habit of assuming that language has in it sacrosanct or tabooed ingredients. Words have no authority in themselves or magical equivalents. It is up to us as listeners, as effectors of communication, to discard the out-moded magical rituals in language and to think of words as no more than symbolic or factual representation. To do otherwise is a step toward confusion, misevaluation and a reverting back to the primitive and the infantile.

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Appraisal of Dartal in Treatment of Huntington's Chorea

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In a recent communication Matthews[2] reported the clinical trial of thiopropazate, 1-(2-acetoxyethyl) 4-13-(cholor-10-phenothiazine) propyl 1 piperazine dihydrochloride. This drug is now being released experimentally by G. D. Searle and Company as Dartal. Matthews used the new drug in nearly all the diagnostic categories and concluded that the drug seemed similar to chlorpromazine in its indications and side effects. It produced pseudo-parkinsonism more readily, became active therapeutically more readily, and had fewer side effects than chlorpromazine. Dr. Matthews also noted that the drug seemed to have a specific sedative effect in Huntington's chorea.

In 10 of 11 cases of Huntington's chorea, Matthews found that the involuntary muscular activity was markedly suppressed. He stated that pre- and post-treatment motion pictures in eight cases clearly demonstrated this. Because of the dearth of therapeutics suggested for Huntington's chorea, the suggestion that Dartal might be effective for this disease entity is intriguing. Further study of the drug is indicated. This is a preliminary report of the use of the drug on five patients in this hospital.

Material and Method

The patients in this State Hospital who had received diagnoses of Huntington's chorea were assembled for further evaluation and study. Five patients were found to be unquestionably victims of Huntington's chorea. These patients had the classical irregular choreaform movements, a compatible history of onset of the disease, and progressive dementia. In addition, four of the five patients were 2nd and 3rd generation descendants of a common ancestor.

The patients were assembled and without rehearsal or a special explanation were briefly photographed after removing their shirts or sweaters. A day later the patients were subjected to a minimal social behavior test.[1] The patients were then started on Dartal, 20 mg. t.i.d. After a period of eight weeks, the patients were again subjected to the minimal social behavior test and were rephotographed under conditions similar to the first series of pictures. The film strips of each patient taken before and after administration of the drug were then spliced together. Non-participating observers were asked to judge which strips were taken before the drug administration and which strips were taken after the drug administration. The group of non-participating observers was made up of five trained psychiatrists, five residents and five student nurses.

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Results

These 15 observers judging the before and after sequence strips on five patients were correct in 49 instances. The probability of obtaining 49 or more correct guesses out of 75 attempts subjected to statistical evaluation demonstrates that the 15 observers were discriminating between the before-after film sequences (and by implication, the drug effect).

There was no change in the social behavior (and by implication the mental status) as tested by the minimal social behavior test.

Conclusions

This experiment with before and after motion pictures testing for the suppression of involuntary movements in Huntington's chorea by Dartal demonstrates that the drug does have some suppressive effect. It does not seem to have any effect on the mental status of social behavior of the patients as determined by our test. No untoward side effects were noted.

There is certainly ample evidence here to continue the use and study of Dartal in Huntington's chorea in larger dosages and for longer periods of administration.

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"Schizophrenogenic Mothers"

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Introduction

The term "schizophrenogenic Mothers" was coined by Fromm-Reichmann.[13] Since that time several studies, most of them of subjective quality and some attempting objective quantifications have crystallized a picture of the parent who might be called schizophrenogenic.

The actual fact of the existence of the schizophrenogenic mother becomes a moot question especially among those who insist on a demonstrable pathological basis for cases of schizophrenia. However, the contention is made in this paper as it is elsewhere that the term "schizophrenia" lacks specificity because it is not the name of a single definite disease but rather functions as a title for a number of somewhat similar patterns of maladaptation and character tendencies which are not necessarily similar in etiology and prognosis. Therefore, when a sliding etiologic scale must be assumed—constitutional and psychologic causes added in all possible proportions—it behooves those who do psychotherapy with schizophrenic patients to gain as much insight into any possible contributing psychologic factor, an important one of which might well be the schizophrenogenic mother.

It is also maintained that these mothers have a common denominator and that they promote a consistent pattern of interaction, the understanding of which will lead to a closer understanding of their offspring in therapy. This paper is concerned with three of the author's cases wherein a mother considered of etiologic potency played a significant role. At the same time one successful approach and two unsuccessful interventions are offered as possibly illuminating experiences.

Following are detailed the cases and what was attempted with the appreciation of the above implications:

Case #1: M.K., 21, was admitted to our service after mother had decided that psychotherapy and insulin therapy in another hospital were "doing my daughter more harm than good." In assaying more closely the mother's attitudes it was evident that she could not endure her "child's" behavior at home nor could she put up with her own guilt for having her in the hospital.

This attractive college senior had many somatic complaints, was actually deluded in thinking she could smell her "rotten insides" which were also "bloody" and which she was about to "heave them up at any moment" with death, of course, ensuing. Paranoid delusions were also prominent. Patient was tearful, histrionic, and demanding. It would seem that here was a case which began by mother rejecting the patient when she preferred patient's twin brother and in turn was overwhelmed by her guilt about this. Patient then capitalized on this guilt with hostile-dependency; mother reacted with overindulgence. Father was and is a very passive ineffectual person. Therapist never dealt with him.

It soon became evident as mother hovered solicitously near the hospital, visited at every opportunity and telephoned frequently that we had to contend with her also. Two drastic steps were taken after it was felt that the mother had surveyed our set-up and essentially had accepted it; 1) Visits were reduced and soon discontinued with mother told to go back home. 2) Mother would see a social worker who was to be her contact with the hospital and ostensibly would help her understand her daughter's case. These two conditions would have to be met before we would continue with the case.

As the severance occurred the patient became increasingly demanding and progressively more disorganized. EST was given resulting in such rapid improvement that after the third treatment it was discontinued. To this date it is assumed that the efficacy of these few EST's was attributable to psychological factors.

One month later patient was released from hospital with plans to perpetuate the separation as the key to recovery. Today after three years of continuous therapy this patient supports herself at an office job where she is a valuable employee. She is resuming her college career with night courses and recently managed to break a fair but neurotic engagement she had blundered into a year previously. Her mother has also readjusted adequately with her home and a job. During these three years the mother has called the therapist less and less. The symbiosis is concluded.

Case #2: E.H., 33 single, youngest of four was referred to psychiatric out-patient clinic after a bout of alcoholic hallucinosis in the medical wards. In referring him to our clinic it was felt that the patient showed many paranoid concerns and it could not be ascertained that the amount of drinking was particularly excessive.

From the outset, E., revealed himself as a hesitant, tremulous, and a very anxious but appealing

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young man. He felt his troubles had started three years previously towards the last six months of his navy hitch (twice torpedoed) when he would get very anxious and shaky about his duties. New situations were too threatening and he found himself drinking more and more to face them. Co-workers unreasonably upset him. He felt they were concerned with him and were critical and disparaging.

After his navy discharge it was extremely hard to get himself to resume his skilled job in the printing business. He returned home to his father and mother and eventually with the help of morning and afternoon drinks took up a job which he left after six months because "they were watching everything I did, and these two brothers were after my job." Going to a movie distressed him for he feared that the teen-agers would gang up on him. E. was paranoid, drinking continuously and showing such a leaning towards religiosity that a schizophrenic state was considered. He remained at home but expressed concern that he was becoming like his 48 year old uncle who hadn't worked in over 20 years, had always stuck close to his own mother, and would spend long hours in bed flipping a half-dollar. E maintained he wanted to get away from home.

E.'s father, who had always been a withdrawn, quiet passive individual, died of a gastric ulcer hemorrhage aggravated by drinking. E. and mother became closer than ever and it was felt by the therapist that a separation had to be promoted now or never. Mrs. H. superficially endorsed the idea but made continuous suggestions to sabotage the separation—"perhaps after I'm settled in a smaller apartment," "after E.'s been working regular and has a steady job," and "when we're sure he's not drinking anymore." She would also play for sympathy by reminding one of the death of her other son in a bar-room brawl and, of course, of her recent widowhood.

When this attitude was explained to E. and the need for separation from his mother developed he spontaneously told of a recent dream where he and his father had fallen from a room. Father had been killed while he had only hurt his right leg. In the dream an unknown person appeared who began to help his leg when in came patient's mother and drove the helper away by stating she was going to take care of patient herself. The patient said he felt like he preferred this in the dream. He associated that unknown person with the therapist trying to help him and mother interfering. E. did not return for his next hour. To this date (two years later) he is still living with mother, working intermittently and drinking regularly. Phobic, paranoid delusions still exist.

It should be added that when E. was taken by his mother for his first day of school he raised such a fuss and held to his mother's leg so tenaciously that he had to be taken home again. All through his childhood years E. played close to mother and if he ever got into a fight of any sort he would dash to mother who invariably stood up for him, once to the point of an actual fight with the mother of a playmate who had punched E. That this case is marked with great separation anxiety is obvious.

Case #3: T.M., 23, a brilliant graduate student was referred to the university psychiatrist because of deterioration in work, obvious anxiety in class and overt manifestations of many paranoid ideas. T. felt that another graduate student, "a worldly marine veteran," because of supposed envy, was using his popularity to get the other students against T. Things had actually come to a point where T. had threatened his "rival" and insisted he "leave me alone or else.." T. interpreted many trivial incidents as being purposely directed at him.

This only son has never dated. He answered many personal questions such as, "What do you plan to do after graduation?" by telling us that "Mother thinks it would be smart to work here in St. Louis." Or, "Mother and I have considered transfer to another university but I would lose my scholarship and would also have to pay room and board away from home."

T. and the psychiatrist set up a therapeutic situation but mother soon interfered by taking him to the family physician who prescribed Thorazine with some degree of relief obtained. After the psychiatrist had contacted the family physician and revealed to him some details of the problem, his help was enlisted in reinforcing the psychotherapeutic endeavors. Mother, however, interfered further with therapy by any means at her disposal. She refused to come to the office and talk the problem over, preferring to make long and haranguing telephone calls. As the boy continued to come for therapy she used a special dispensation obtained by the psychiatrist from the graduate school (in view of T's brilliance) to take him for a vacation because "that's all he needs." On his return T. manifested desire to discontinue therapy as he felt that he would be able to handle "that ex-marine" by "paying no attention to him." Patient's father, incidentally was contacted and he allowed that "mother knows what's best." With relationship to mother reinforced and the paranoid ideations in abeyance, T. has managed to continue his studies.

Discussion

These mothers certainly seemed to have many characteristics in common. They appeared solicitous, over-protecting, dominating, possessive, anxious and basically rejecting. They at least fit the pattern and stereotype that has emerged in the literature as "schizophrenogenic mothers."

In studies of mothers of schizophrenics over-protection has been noted by Kassanin, Knight and Sage,[1] Levy,[2] Gerard and Seigel,[6] Reichard and Tillman,[7] Nuffield,[9] Freeman and Grayson.[10] While oversolicitousness was noted by Despert,[3] Tietze,[5] and J. C. Mark.[1]

A cold and aloof detachment has been

noted by Kanner[4] in autistic children, by D. D. Jackson[16] in the "Puritanical" type of mother and by Prout and White[8] who considered these mothers generally less empathic. Tietze[5] called them emotionally empty. Possessiveness or controlling was also recognized by some.[5,6,9,10,16]

The consistency of findings seems to reiterate an entity which possess a definite pattern of behavior which probably determines much of the personality, character and pathology of the patient. Also these findings point to a reverberating relationship of transcendental magnitude which is a symbiosis between the schizophrenic and his mother much as Lidz and Lidz[11] have exemplified.

This would differ from the symbiotic child as defined by Mahler and Goslinger:[12] "The children suffering from symbiotic child psychosis described in this and previous papers are not to be thought of as normal children in whom a psychotic process is induced by an emotionally disturbed mother. These children are constitutionally vulnerable and predisposed toward the development of a psychosis." Mahler's use of the concept of symbiosis tends toward symptomatological significance whereas the concept used here might be considered of etiological importance.

The fact that there apparently is a specific personality of some mothers of schizophrenic patients is too suggestive to be left hanging as merely an interesting triviality. Even the existence of predisposing and precipitating factors which are foreign to the mother does not obviate the idea of what might be called "symbiophrenia" since the implication is of an entity that may not have existed but for this overwhelming and reverberating relationship. School phobias as characterized by Eisenberg[15] has much in common here.

That "symbiophrenia" exists has in one way or another been appreciated by those who have dealt with these schizophrenogenic mothers, their offspring, and their symbiotic relationships. Certainly these clinical impressions might give us worth while leads for further investigations and differentiations of the types of psychotic reactions which may be at the present time erroneously classified together.

Summary

Experiences with three schizophrenic patients are presented. Similarities exist especially as to type of mother. These mothers fit the concept of "schizophrenogenic" mothers as evolved in the literature.

The tentative implication is made that these mothers are a pathogenic entity and in turn create a pathologic picture which by its symbiotic character leads to the practical concept of "symbiophrenia."

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Evaluating a New Anticonvulsant in a "Therapeutic Community"

C. H. CARTER, M.D.

Non-commercial evaluation of new or experimental compounds in a facility where patients would be under constant observation with detailed case histories and complete up to date follow-up records has long been advocated. It is our opinion that a more thorough and comprehensive analysis of a drug's action and effect can be made under such a controlled situation.

Sunland Training Center is, in our opinion, an ideal "therapeutic community." The patients have been institutionalized or hospitalized for some length of time and live more or less permanently in the center. Our community is divided into cottages with spacious grounds and is designed primarily for the care of mentally defective, epileptic and spastic children and some adults, many with combinations of these problems and others with neuropsychiatric difficulties. There are approximately 30 individuals in each cottage and special effort is made to keep the cottages as "home-like" in atmosphere as possible. There is a completely staffed hospital with a great many of the staff living in homes in or near the area. Since our patients are "captive," so to speak, observations can be continuous and conclusions or evaluation of the true effect of a drug can be made easily and rapidly.

Amino - glutethimide* (alpha - [p - aminophenyl]-alpha-ethyl glutarimide), which had demonstrated good anticonvulsant properties with minimal side effects and could be used concomitantly and effectively with other accepted anticonvulsant compounds, was selected for clinical evaluation. Amino-glutethimide is an analogue of glutethimide (Doriden®-Ciba), a widely used non-barbiturate sedative-hypnotic which has been commercially available since 1955.

Lambros,[1] in a preliminary report, stated that of 13 patients on amino-glutethimide only one, a temporal lobe convulsive, was not completely controlled. He also reported that another group of 14 patients on amino-glutethimide in combination with other anticonvulsant drugs exhibited a good response with 11 being completely controlled.

Niswander and Karacan[2] observed that when amino-glutethimide was used alone or in combination with diphenylhydantoin sodium or phenobarbital it resulted in a 25 to 35 per cent reduction in the seizure frequency of 38 patients suffering from chronic brain syndrome associated with convulsive disorder with psychotic reaction.

Fabisch,[3] reporting on the use of amino-glutethimide in 51 epileptic patients, concluded that amino-glutethimide used in combination with other anticonvulsants is the method of administration to be recommended.

Method of Study

Our study comprised 104 patients ranging in age from 4 to 57 years suffering from grand mal, petit mal and a mixture of the two types of convulsive seizures. All had been under treatment for months or years before the study and their convulsive seizure frequency, both with and without medication was well documented. There had been some control for each patient with various anticonvulsant drugs. Amino-glutethimide was started at a dosage of 125 mg. three times daily in younger patients and at a dosage of 250 mg. three times daily in older ones. The dosage of previous anticonvulsant drugs was gradually reduced after initiating amino-glutethimide and dosage of the latter was increased as necessary to control seizures. The maximum daily dose of amino-glutethimide was 1500 mg. per day. Blood pressure, blood counts, urinanalyses and liver function studies were evaluated periodically during the study.

Results

Amino-glutethimide was used in combination with other anticonvulsant drugs in all patients. The dosage of other anticonvul-

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From Sunland Training Center, Gainesville, Fla.

*Amino-glutethimide was supplied as Elipten® through the courtesy of Ciba Pharmaceutical Products, Inc., Summit, New Jersey.

sants was reduced to the lowest possible level which would exhibit continued or improved control of seizure frequency.

The best results were achieved in the grand mal seizures. However, good results were obtained in the petit mal seizures. Of the 104 patients treated, 27 exhibited complete control of seizures while 68 did not show complete control but had a reduction in the frequency of seizures. Nine patients did not exhibit any change in frequency of seizures.

It has always been difficult to make a definitive statement on the reduction of petit mal seizures; therefore, determinations of the reduction in petit mal seizures were made by studying the electrical pattern changes induced by amino-glutethimide on the electroencephalogram. Using the electroencephalogram as the principal criterion for establishing whether improvement was achieved, we found pattern changes indicating improvement readily discernible on the tracings.

It is also our opinion that behavior problems seem to have a somewhat definite pattern on the electroencephalogram. The tracings demonstrated that amino-glutethimide had a favorable effect on the alteration of an abnormal tracing toward a fairly normal pattern while the patient was receiving amino-glutethimide.

No patient exhibited a skin rash while on amino-glutethimide. There were no abnormal changes in blood pressure, blood counts or urinanalyses during more than a year and one-half of therapy with amino-glutethimide. Even though 35 of the 104 patients had had infectious hepatitis prior to therapy with amino-glutethimide, some of whom had liver function studies indicative of permanent liver damage, there were no alterations in the liver function determinations even after more than a year and one-half of continuous therapy with amino-glutethimide. One patient had a loss of appetite while receiving amino-glutethimide and two other patients exhibited mild respiratory depression which may or may not have been attributed to amino-glutethimide. The respiratory depression promptly cleared upon discontinuance of the drug.

Summary

An accurate and thorough analysis of a new anticonvulsant compound, amino-glutethimide, was made in a "therapeutic community"; an institution population consisting of so-called "captive" patients who could be easily observed and evaluated over long periods of time.

Amino-glutethimide proved to be an effective anticonvulsant drug for the treatment of grand mal, petit mal and mixtures of the two types. Its effectiveness is enhanced by the concomitant use of other anticonvulsant drugs, usually with reduced dosage of the other anticonvulsants.

Amino-glutethimide exhibited a higher degree of effectiveness in the treatment of grand mal seizures, but was also effective in reducing the frequency of seizures in petit mal. Electroencephalographic tracings were used to determine the reduction in petit mal seizures as well as whether abnormal tracings observed in behavior problems were altered toward normal.

Amino-glutethimide is an anticonvulsant drug with minimal serious side effects. Nevertheless, we recommend, as with all anticonvulsant drugs, that the initial dosage be kept below tolerance levels and gradually increased to a therapeutic level in order to avoid possibe side effects. Periodic blood counts and urinanalyses should be performed during therapy with amino-glutethimide.

Since amino-glutethimide is more effective in reducing frequency of seizures when used with other anticonvulsants, particularly diphenylhydantoin sodium, we recommend such a combination to enhance effectiveness and reduce the dosage of both drugs.

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Transvestitism:

(Employment of Somatic Therapy With Subsequent Improvement)

ALFRED E. EYRES, M.D.

Approximately 50 cases of transvestitism have been reported in the literature. The majority have been males. Probably the most unusual and fantastic account of a transvestist is that of Lucy Hicks, reported in *Time* magazine[1] on November 5, 1945 under the title "California Sin and Souffle." In this instance a versatile and talented male negro lived and operated a bawdy house in a California city for more than thirty years. Lucy was the trusted servant and skilled chef of the elite, the catylist of community civic and philanthropic affairs, the operator and promoter of a string of bordellos. Her (His) undoing came about when the Navy traced a case of gonorrhea to her establishment and the health officers insisted that she be examined along with her girls.

The etiology, dynamics and psychopathology of transvestitism are vague, uncertain and variable. Fenichel[2] believes the transvestitist occupies a position somewhere between the passive homosexual and the fetishist. Indeed, the transvestitist is a first cousin of the fetishist because of the overvaluation placed upon woman's clothing. Moreover each preserves the fantasy of a woman with a penis. C. Hamburger[3] of Copenhagen received 465 letters from all over the world following the extensive publicity given his patient "Christine." Various reasons and motives for wishing change of sex were given. Is this disorder deeply rooted in instinctual factors?

Bowman and Engel[4] have discussed the medico-legal aspects and reviewed the many perplexing difficulties and problems that arise. Peabody, Rowe and Wall[5] advocate a psychoanalytic approach to dynamically understand and treat this disorder. Effective therapy, formidable and difficult in any of the personality disorders, is in this particular entity next to impossible. Any therapeutic approach relieving symptoms, tension and discomfort and promoting better adjustment certainly is in order. If this can be done, the patients will be grateful as were the two reported and treated.

Case 1. A young white, married male 25 years old, father of two, a utility office worker had a multiplicity of complaints. Included were tension, depression, phobias of insanity and homosexuality and of doing his two young daughters bodily harm. Too, there were intense somatic complaints referable to the head, heart, lungs, gastro-intestinal and genito-urinary systems. He stated further: "I have very funny feelings in my testicles." He told of his need to wear women's clothing. On occasion he would bedeck himself entirely in female attire and go out at night. Fearful of being discovered, he confined his activities to the house and here supreme satisfaction ensued if he wore high heeled pumps, nylons and a silk night gown. Rhythmic clicking of the heels frequently resulted in spontaneous orgasm.

This man appeared tense, perplexed, apprehensive, and somewhat depressed. Excerpts of his past history were as follows: He was the youngest of four siblings. Two sisters were alive and well, though one sister was somewhat nervous. His older brother was deceased, as result of drowning and following this his mother had sustained a depression of about a year's duration. During periods of irritability, she occasionally lashed out at the patient and would say: "Why couldn't you have been like Herbie?"

He recalled that he first became aware of homosexual urges when a freshman in high school. This concerned him little as he believed he would outgrow it. He had been honorably discharged from the Navy after two years of service. His transvestist cravings dated back about three years.

An attempt was made to handle this patient psychotherapeutically for a total of ten hours. His speech became less spontaneous. The phobias and somatic symptoms lessened and his depression deepened. A Funkenstein test was done. The epinephrine response was adequate while the mecholyl reaction measured a number six verifying the clinical symptomatology of depression and probable good response to electroconvulsive therapy.

In lieu of hospital insurance and adequate funds for hospital expense, it was necessary to treat him in the office. After receiving fifteen electroconvulsive treatments given with the Reiter electro-stimulator he made a good recovery from his depression. For two years he has remained well and has been able to work and support his family and has been better able to cope with his basic problem.

Case 2. A white, single, male of 19, an excellent student in his third year at college complained of his insatiable desire to wear women's clothing. Although he showed few manifestations he stated that he was about to burst because of tension and anxiety. In spite of the fact that he was doing wel

scholastically, he berated himself stating he was lazy, shiftless, without any ambition and unable to complete anything he attempted to do.

He could recall his intense interest and fondness for female attire from the age of five. His father and mother were aware of his problem but he felt they did not recognize its intensity. Furthermore they were certain that he would outgrow it. He denied homosexual experiences and homosexual tendencies. There could remain little doubt of the presence of the latter, however, because he possessed vague phobias of men and of seeking male friendships. Too, whenever he had dates, which was not often, he made sure "The girl was at least five or ten years older than I."

He stated that all his transvestist activities were carried on at home, generally late at night after everyone had gone to bed. His anxiety would reach a very high pitch and he would eat a huge meal to quiet himself down. His obesity (weight 230 pounds) attested and gave witness to his addiction to food. He used neither alcohol nor tobacco.

The past history was not especially significant. He was the first of three siblings. He described his family situation as close-knit and tranquil. He called himself a belligerent driver and admitted that he had been involved in a number of traffic accidents, one of which had caused him to be hospitalized with a leg injury.

A Funkenstein test was done. The epinephrine response was adequate but the mecholyl curve was of the paradoxical type with a relatively high trajectory failing to return to homeostasis level at the end of the twenty-five minute interval.

This patient verbalized poorly and after several visits did not talk spontaneously at all. The internist who referred him had as little success in controlling his anxiety with tranquilizing drugs as he had had in trying to reduce his weight through dietary restrictions. Said the patient: "All of these damn medicines haven't helped me a bit. Can you do something for me?"

Because his anxiety and tension were most distressing, a decision to treat him with high frequency electric current (Reiter-Sedac) was made. A total of 29 treatments, each of one hour's duration, were given two times weekly for a three month period. The patient showed improvement from the beginning. His anxiety and tension gradually subsided and he was better able to cope with his problem. This man is presently continuing his academic work and two years after treatment his benefit has been sustained.

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